Waterbird Conservation Plan for the Mid-Atlantic/New England/Maritimes Region

Appendix 4—Conservation Projects

Project ID #	Region	Main Contact	Program/Project name
1	**GoM**	**Linda Welch**	Seabird Outreach and Education in the Gulf of Maine
2	**GoM**	**Linda Welch**	Alcid Restoration Project
3	**GoM**	**Brad Allen**	Acquisition of Nationally Significant Waterbird Nesting Islands
4	**GoM**	**Brad Allen**	Razorbill Inventory and Monitoring
5	**GoM**	**Linda Welch**	Leach's Storm-Petrel Restoration and Monitoring
6	**GoM**	**Linda Welch**	Pelagic Bird Surveys in the Gulf of Maine
7	**GoM**	**Linda Welch**	Gulf of Maine Seabird Nesting Island Stewardship Program
8	**GoM**	**Linda Welch**	Tern Restoration Project in the Gulf of Maine
9	**MidAtl**	**Barry Truitt**	Colonial Waterbird Habitat and Productivity Enhancement Through Selective Predator Removals in Virginia
10	**MidAtl**	**Barry Truitt**	Colonial Waterbird Disturbance Management Program
11	**SNE-LI**	**Carol Trocki**	Partnerships for Improved Waterbird Management in Narragansett Bay
12	**SNE-LI**	**Jenny Dickson**	Coastal Seabird/ Human Disturbance Campaign
13	**MidAtl**	**Becky Harris**	Seabird Ecological Assessment Network (SEANET)
14	**GoM**	**Brad Allen**	Land Acquisition/Seabird Restoration in Coastal Maine
15	**GoM**	**Brad Allen**	Great Spoon Island Inventory
16	**GoM**	**Brad Allen**	Little Libby Seabird Restoration Project
17	**GoM**	**John Anderson**	Black Guillemot Nesting Habitat Project
18	**GoM**	**John Anderson**	Gull Population Biology Project
19	**GoM**	**John Anderson**	Leach's Storm-Petrel Monitoring Project
20	**GoM**	**Tom Hodgman**	At-Sea Monitoring of Pelagic Waterbirds
21	**GoM**	**Tom Hodgman**	Inventory of Inland Heronries
22	**GoM**	**Tom Hodgman**	Inland Waterbird Habitat Protection Analysis
23	**GoM**	**Tom Hodgman**	Regional Source/Sink Dynamics of Black Tern Populations
24	**GoM**	**Tom Hodgman**	Population and Habitat Ecology of Marshbirds in Maine
25	**MidAtl**	**Doug Forsell**	Development and Distribution of a Field Guide to Beached Birds (Dead) for the North Atlantic
26	**MidAtl**	**Doug Forsell**	Citizen Science Network for Beached Bird Surveys
27	**MidAtl**	**Doug Forsell**	Waterbird Bycatch: Assessment and Management for Elimination/Reduction to Minimal Levels
28	**MidAtl**	**Doug Forsell**	Pelagic Waterbird Distribution and Abundance Database
29	**MidAtl**	**Doug Forsell**	Verification and Completion of North Atlantic Coastal and Marine Waterbird Database
30	**MidAtl**	**Doug Forsell**	Mortality and Sub-lethal Effects of Offshore and Coastal Wind Power Facilities on Waterbirds
31	**SNE-LI**	**Patrick Comins**	Wading Bird Productivity
32	**SNE-LI**	**Patrick Comins**	Land Acquisitions to Protect Key Nesting Areas for Waterbirds in Connecticut
33	**SNE-LI**	**Patrick Comins**	Inventory of Tern Foraging and Prey Resources
34	**SNE-LI**	**Patrick Comins**	Site Specific Conservation Planning at Important Waterbird Bird Areas in Connecticut
35	**SNE-LI**	**Patrick Comins**	Determination of Key Nesting Areas for Freshwater Wetland Nesting Birds
36	**SNE-LI**	**Patrick Comins**	Determination of Limiting Factors for Beach Nesting Waterbirds
37	**SNE-LI**	**Patrick Comins**	Public Education and Outreach for Colonially-nesting Waterbirds
38	**SNE-LI**	**Patrick Comins**	Correlation Between Nesting Colonies of Colonial Wading Birds and Foraging Areas
39	**SNE-LI**	**Patrick Comins**	Seasonal Waterbird Usage Inventory of Long Island Sound
40	**SNE-LI**	**EJ McAdams**	Coastal Waterbird Habitat Acquisition
41	**SNE-LI**	**EJ McAdams**	Harbor Heron Health & Monitoring Program
42	**SNE-LI**	**EJ McAdams**	Metapopulation Studies
43	**SNE-LI**	**EJ McAdams**	Pelagic Seabird Research Initiative
44	**MidAtl**	**Ruth Boettcher**	Public Education and Outreach for Colonial Nesting Waterbirds at Grandview Beach
45	**MidAtl**	**Ruth Boettcher**	Statewide Colonial Waterbird Surveys in Virginia
46	**MidAtl**	**Ruth Boettcher**	Urban Waterbird Management Plan for Virginia's Coastal Plain
47	**MidAtl**	**Ruth Boettcher**	Developing a Comprehensive Waterbird Monitoring Plan for the Chesapeake Bay Estuary
48	**MidAtl**	**Steering Committee**	Increase Agency Capacity
49	**MidAtl**	**Steering Committee**	Aquaculture Impact Assessment
50	**MidAtl**	**Steering Committee**	Atlantic Wide Breeding Survey
51	**MidAtl**	**Steering Committee**	Best Management Practices Manual
52	**MidAtl**	**Steering Committee**	Contaminants Loads and Effects
53	**MidAtl**	**Steering Committee**	Disease Studies
54	**MidAtl**	**Steering Committee**	Foraging/Food-Chain Dynamics
55	**MidAtl**	**Steering Committee**	GIS System
56	**MidAtl**	**Steering Committee**	Local Planning
57	**MidAtl**	**Steering Committee**	Patuxent Monitoring Database
58	**MidAtl**	**Steering Committee**	Evaluating the Impact of Hunting on Rails
59	**MidAtl**	**Steering Committee**	Marshbird Monitoring Program
60			no project
61	**GoM**	**Chris DeSorbo**	Filling Significant Baseline Data Gaps for Atlantic Red-throated Populations
62	**GoM**	**Wing Goodale**	Gulf of Maine Seabird Contaminant Assessment Network (GOMSCAN)
63	**GoM**	**Wing Goodale**	Loon Web Camera
64	**Canada**	**Quebec's WB Plan**	Seabird Monitoring in the Mingan Archipelago National Park Reserve and the Forillon National Park of Canada
65	**Canada**	**Quebec's WB Plan**	Seabird monitoring in the St. Lawrence Estuary, the Gaspé Peninsula and the Magdalen Islands

Project ID #	Region	Main Contact	Program/Project name
66	**Canada**	**Quebec's WB Plan**	Monitoring of the Northern Gannet Population in the Gulf of St. Lawrence
67	**Canada**	**Quebec's WB Plan**	Population Monitoring of the Ring-billed Gull in BCR 13 and 14
68	**Canada**	**Quebec's WB Plan**	Population Monitoring of the Double-crested Cormorant in BCR 13 and 14
69	**Canada**	**Quebec's WB Plan**	Monitoring of Non-colonial Waterbirds in Quebec
70	**Canada**	**Quebec's WB Plan**	Monitoring Great Blue Heron Colonies in Quebec
71	**Canada**	**Quebec's WB Plan**	Canadian Lake Loon Survey
72	**Canada**	**Quebec, BCR14**	Marsh Monitoring Program Expansion to Quebec
73	**Canada**	**Quebec's WB Plan**	Recovery of Tern colonies of the Gulf of St. Lawrence
74	**Canada**	**Quebec's WB Plan**	Predator Control on Islands in Southeastern Canada
75	**GoM**	**Steven Kress**	Restoration and Management of Waterbird Nesting Sanctuaries on the Maine Coast
76	**GoM**	**Steven Kress**	Puffin Place
77	**Canada**	**Daniel Brodage**	Black Duck Joint Venture
78	**Canada**	**Michael Robert**	Species At Risk Program for Canada
79	**Canada**	**Becky Whittam**	Cape Breton Beached Bird Survey
80	**GoM**	**Brad Allen**	Isle au Haute Acquisition
81	**GoM**	**Sandy Ritchie**	Kennebec/Merrymeeting Bay (MMB) Acquisition
82	**GoM**	**Tom Hodgman**	Cobscock Bay Acquisition
83	**Canada**	**CWS - Quebec**	St. Lawrence Estuary Acquisition
84	**Canada**	**CWS - Quebec**	Marshbird, Tern and Shorebird Protection in South Shore Gaspe
85	**Canada**	**CWS - Quebec**	Magdalen Islands Acquisition and Management
86	**Canada**	**Al Hanson**	St. Lawrence Coast Acquisition and Stewardship
87	**Canada**	**Andrew Boyne**	St. Margaret's Bay and Mahone Bay Island Acquisition and Stewardship
88	**Canada**	**Brad Allen**	Great Cormorant Monitoring in BCR 14
89	**Canada**	**BCR 14 Plan**	Seabird Colony Restoration in BCR 14
90	**GoM**	**Tom Hodgman**	Salt Marsh Monitoring Program in BCR 14
91	**Canada**	**John Chardine**	Seabird By-catch and Oil Spill Issues in BCR 14
92	**Canada**	**Keith McAloney**	Surveys of Birds Wintering in BCR 14
93	**GoM**	**BCR 14 Plan**	Coastal Ethics Outreach and Education
94	**GoM**	**Scott Hall**	Expand Marine Conservation Education in BCR 14
95	**GoM**	**Linda Welch**	Coastal Education Center
96	**Canada**	**Al Hanson**	Control Recreation and Development in BCR 14's Coastal Marshes
97	**GoM**	**BCR14 Plan**	Guidelines for Man-made Wetlands
98	**GoM**	**BCR14 Plan**	Guidelines for Beaver-created Wetlands
99	**Canada**	**BCR14 Plan**	Inventories of Inland Wetlands in BCR 14
100	**Canada**	**BCR14 Plan**	Standardized Inland Wetland Monitoring In BCR 14
101	**Canada**	**BCR14 Plan**	Inland Wetland Data Sharing in BCR 14
102	**GoM**	**BCR14 Plan**	Coordination of Inland Wetland Conservation Efforts Between BCRs
103	**MidAtl**	**Yigal Gelb**	NYC Audubon's Harbor Herons Project: Nesting Survey
104	**MidAtl**	**Yigal Gelb**	The Healthy Harbor Herons Project
105	**MidAtl**	**Yigal Gelb**	NYC Audubon's Harbor Herons Monitoring Program
106	**SNE-LI, GoM**	**National Audubon Society**	Exploring the Cormorant Controversy
107	**MidAtl**	**Manomet Center for Conservation Sciences**	Mid-Atlantic Monitoring Database Expansion
108	**MidAtl**	**Dave Jenkins**	Habitat Creation and Restoration
109	**GoM**	**Scott Hall**	Stratton Island Research and Management
110	**GoM**	**Scott Hall**	Little Duck Island Management
111	**GoM**	**Scott Hall**	Eastern Egg Rock Management
112	**SNE-LI**	**Jenny Dickson**	Nest Site Acquisition
113	**MidAtl**	**Ruth Boettcher**	Craney Island
114	**MidAtl**	**Karen Bennett**	Protection Incentives
115	**MidAtl**	**Ruth Beck**	Grandview Nature Preserve
116	**MidAtl**	**Ruth Beck**	Large Bird Population vs. Public Safety
117	**MidAtl**	**Ruth Beck**	Artificial vs. Natural Nest Site Use
118	**SNE-LI**	**Dave Adams**	New York Marshbird Monitoring Project
119	**SNE-LI**	**Dave Adams**	Marshbird Inventory
120	**SNE-LI**	**Dave Adams**	New York Loon Monitoring
121	**SNE-LI**	**Dave Adams**	Long Island South Shore Program
122	**SNE-LI**	**Dave Adams**	Lake Ontario Inventory
123	**SNE-LI**	**Dave Adams**	Tern Integration
124	**SNE-LI**	**Sara Williams**	Vegetation Management
125	**MidAtl**	**State Non-Game Programs**	State Outreach and Education
126	**SNE-LI**	**Andrew MacLachlan**	Eroded nesting sites
127	**MidAtl**	**Dave Jenkins**	Waterbird Focus Area Enhancement
128	**MidAtl**	**Dave Brinker**	Manage/Restore Wild Rice Habitat
129	**SNE-LI**	**Min Huang**	Productivity and monitoring of secretive wetlands birds in CT

1	**Program/Project Name:** Seabird Outreach and Education in the Gulf of Maine	**Submitted by:** Linda Welch

Implementation Priority:

Rationale: Public use and access to seabird nesting islands continues to increase along the coast of Maine. Unfortunately, these islands are used by a variety of nesting seabirds which are adversely affected by human disturbance and habitat alteration of the islands. A single visit to a seabird colony, during critical periods of the nesting cycle, can eliminate an entire year's production from a variety of species. There is a critical need to develop outreach material to assist recreational users of coastal islands and private landowners with decisions that affect seabird nesting islands.

Objectives:

- Increase awareness in the general public regarding the life history needs of nesting seabirds, and the effects of disturbance on the birds
- Develop and implement a "Universal Signage" project that identifies seabird nesting islands from the water, indicating that the islands are closed to public access during the nesting season. Additional information would be distributed to retailers, tour operators, boat ramps, and map production facilities
- Develop and distribute "Living with Seabirds" guide that provides life history information, consequences of disturbance or habitat alteration, island ethics information, and recreational boater concerns

Deliverables:

- Universal Signage project: signs placed on seabird nesting islands indicating island is closed during nesting season, and associated background information distributed to interested parties
- "Living with Seabird" guide

Location: Coast-wide in Maine with effort to expand to Gulf of Maine

Target Species: Roseate Tern, Arctic Tern, Common Tern, Razorbill, Black Guillemot, Atlantic Puffin, Leach's Storm-Petrel, Common Eider

Timeline: Immediate need, with project initiation planned for fall of 2004

Lead Organization: USFWS / MDIFW

Activity: Education and Management

Partner Organizations: NAS / MCHT/ Maine Island Trail/ ME Dept of Conservation / Acadia National Park / land trusts / Maine sea kayak guides association

Costs: $45,000

Current Support: $22,000 secured funding from USFWS and $5,000 secured funding from Friends of Maine Seabird Nesting Islands

Unfunded: $23,000 for completion of signage project and production & distribution of supporting educational materials

Potential Sources: MDIFW / MITA/ DOC / ANP / NAS

2	**Program/Project Name:** Alcid Restoration Project	**Submitted by:** Linda Welch

Implementation Priority:

Rationale: Within Maine the number and geographic distribution of islands supporting Razorbills and Atlantic Puffins is significantly limited. Atlantic Puffins currently nest on four islands, while Razorbills nest on six islands. This represents the entire US distribution for these two species. In 2003, Common Murres bred in the Gulf of Maine for the first time in over a century. Any efforts to enhance puffin and razorbill populations and nesting habitat will likely increase the potential of murres breeding in the region.

Objectives:	**Deliverables:**
• Increase number and geographic distribution of Alcid colonies • Provide predator free nesting islands • Increase breeding population of razorbills and puffins in Maine by 50% • Maintain minimum productivity level of 0.5 fledged young / pair • Establish breeding population of Common Murres in Maine	• Establishment of three additional alcid colonies in Maine, which would help secure the long-term viability of these species in Maine
Location: Penobscot Bay east to Canadian border (the Gulf of Maine)	**Target Species:** Razorbill, Atlantic Puffin, Common Murre, Black Guillemot
Timeline: Next 15 years	**Lead Organization:** USFWS / MDIFW / NAS
Activity: Management	

Partner Organizations: To be determined

Costs: For each restoration project: $10,000 for Year 1, with approximately $7,500 each following year for staff and miscellaneous equipment

Current Support: To be determined

Unfunded: To be determined

Potential Sources: To be determined

3	**Program/Project Name:** Acquisition of Nationally Significant Waterbird Nesting Islands	**Submitted by:** Brad Allen, Linda Welch

Implementation Priority:

Rationale: There are over 4,616 islands along the Maine coast. Based on historical data, 616 islands have supported, or currently support, populations of seabirds, wading birds, waterfowl, or bald eagles. Of these 616 islands, 377 were determined to be Nationally Significant based on a criteria developed by USFWS, Maine Department of Inland Fisheries and Wildlife, TNC, and Maine Coast Heritage Trust. Fifty-three colonial nesting seabird islands are currently lacking permanent protection. For instance, Jordan's Delight is a spectacular seabird nesting island, with uncommon seabird diversity and is in close proximity to USFWS refuge islands. All of these islands are currently threatened by development and uncontrolled recreational use.

Objectives:	**Deliverables:**
• Acquire 53 Nationally Significant colonial nesting seabird islands • Permanently protect these islands from development and enforce seasonal closures to protect nesting seabirds • Evaluate potential of each protected island as a tern or alcid restoration site	• Conservation ownership of 53 remaining Nationally Significant Seabird Nesting Islands which now lack permanent protection
Location: Maine (coast-wide)	**Target Species:** Roseate Tern, Arctic Tern, Common Tern, Razorbill, Black Guillemot, Atlantic Puffin, Leach's Storm-Petrel, Great Black-backed Gull, Herring Gull, Laughing Gull
Timeline: Next 15 years	**Lead Organization:** USFWS
Activity: Management, Aquisition	

Partner Organizations: MDIFW, National Audubon Society, Maine Coast Heritage Trust, The Nature Conservancy, and various land trusts from across the state

Costs: $9,466,000

Current Support:

Unfunded:

Potential Sources: Land and Water Conservation Fund, local land trusts

4	**Program/Project Name:** Razorbill Inventory and Monitoring	**Submitted by:** Brad Allen, Linda Welch

Implementation Priority:

Rationale: Razorbills are listed as a threatened species in Maine, and an estimated 350 pairs currently nest on six islands. Although all six islands are under conservation ownership, only three islands are staffed by seasonal technicians that manage predators and limit disturbance to the colony. Two of these managed sites (Petit Manan and Seal Islands) only support one pair of razorbills each. Information on population size and productivity parameters is lacking on the three "unmanaged" colonies. As a result, no current information is available on the status or health of approximately 50% of the statewide population estimate for the species.

Objectives:

- Develop standardized survey methods for monitoring razorbill colonies, that would allow for accurate population estimates and collection of productivity data
- Identify factors that may be limiting population growth or productivity
- Evaluate habitat characteristics of occupied Razorbill habitat, which will assist managers in selecting potential restoration sites

Deliverables:

- Accurate count of Maine's Razorbill population
- Establishment of standardized survey techniques

Location: Old Man Island, Freeman Rock, Pulpit Rock, Matinicus Rock, Petit Manan, and Seal Islands

Target Species: Razorbill

Timeline: Immediate; over next 15-years

Activity: Research and Monitoring

Lead Organization: USFWS / MDIFW / NAS

Partner Organizations: To be determined

Costs: $25,000

Current Support:

Unfunded:

Potential Sources: To be determined

5	**Program/Project Name:** Leach's Storm-Petrel Restoration and Monitoring	**Submitted by:** Linda Welch

Implementation Priority:

Rationale: Within Maine, Leach's Storm-Petrels nest on approximately 35 islands. Two islands located less than two miles apart currently support over 75% of the population. As a result, the potential for a single catastrophic event or disease to significantly affect Maine's Leach's Storm-Petrel population is a major concern. Additional colonies need to be established, and habitat could be enhanced on other islands to facilitate population growth at existing colonies. Leach's Storm-Petrels are burrow nesters, and are generally only active in the evening, making census work very challenging. Standardized survey methods that would allow managers to monitor the status and productivity of numerous colonies in a particular season are needed.

Objectives:	**Deliverables:**
• Develop standardized survey methods for monitoring petrel colonies • Increase Maine population of Leach's storm-petrels by 20% over 2000 level • Increase the number of islands supporting nesting Leach's Storm-Petrels (and increase the number of islands supporting over 100 pairs of petrels) • Maintain at least two islands supporting over 3,000 pairs of petrels • Enhance nesting habitat on petrel nesting islands, particularly those with existing gull control programs	• Standardized survey methods for monitoring petrel colonies • Statewide population estimates, and confirmation of occupation of historical breeding islands • Establishment of additional petrel colonies, and enhanced population size on existing colonies resulting in an increase in Maine's population of petrels
Location: Maine	**Target Species:** Leach's Storm-Petrel
Timeline: Within the next 10 years (immediate potential)	**Lead Organization:** USFWS / MDIFW / NAS
Activity: Research and Management	

Partner Organizations: To be determined

Costs: To be determined

Current Support:

Unfunded:

Potential Sources: USFWS & MDIFW

6	**Program/Project Name:** Pelagic Bird Surveys in the Gulf of Maine	**Submitted by:** Linda Welch

Implementation Priority:

Rationale: The last pelagic bird surveys conducted in the Gulf of Maine occurred over 20 years ago. The effort in 1983 included 26 months of observation, with observations recorded on 61 cruises. Current information on the distribution of pelagic species, the number of species present, seasonal variation, and the number of individuals of each species is needed by both managers and policy makers throughout the Gulf of Maine. Pelagic species face potential threats from oil spills, commercial fishing efforts, and global climate change. Considerable effort has been spent acquiring and protecting breeding habitat for species such as razorbills and puffins, yet information on pelagic habitat use is lacking. This lack of information precludes the ability to evaluate the causes or location of over-winter mortality for these State threatened species.

Objectives:	**Deliverables:**
• Develop methodologies and conduct standardized surveys for pelagic species utilizing the Gulf of Maine • Identify and map species distributions, and locations of "critical" foraging areas • Utilize existing oceanographic monitoring efforts of NMFS and NOAA, research vessels, and US Coast Guard to minimize survey costs • Develop cooperative agreements with tour boat operators to collect data on pelagic species observed during routine trips	• Establishment of standardized survey methods • Report summarizing results of survey (species present, numbers, and distribution)
Location: Gulf of Maine	**Target Species:** Leach's Storm-Petrel, Wilson's Storm-Petrel, Northern Gannett, Audubon's Shearwater, Cory's Shearwater, Greater Shearwater, Manx Shearwater, Sooty Shearwater, Long-tailed Jaeger, Parasitic Jaeger, Pomarine Jaeger, Razorbill, Black Guillemot, Atlantic Puffin, Common Murre, Dovekie, Thick-billed Murre
Timeline: To be determined	**Lead Organization:**
Activity: Monitoring and Research	

Partner Organizations: USFWS / CWS / MDIFW / NAS

Costs: To be determined

Current Support:

Unfunded:

Potential Sources: Partners listed above

7	**Program/Project Name:** Gulf of Maine Seabird Nesting Island Stewardship Program	**Submitted by:** Linda Welch

Implementation Priority:

Rationale: Within Maine, 53 Nationally Significant seabird nesting islands, and hundreds of other islands which currently support nesting seabirds, are privately owned. Island owners are faced with many difficult choices concerning best management practices, disturbance issues, financial concerns, habitat management, and predator control. There is a tremendous need to have a coordinated "conservation–based" outreach effort focused on these privately owned islands. This Stewardship effort would provide dedicated staff to assist landowners with their land management decisions, resulting in direct conservation benefit to numerous species of seabirds.

Objectives:	**Deliverables:**
• Promote conservation-based management of privately owned seabird nesting islands • Develop "island specific" management plans, including seabird census, habitat evaluation, and threat assessment • Increase public awareness of issues affecting nesting seabirds	• Variety of outreach materials designed and produced specifically for private landowners • Management plans for individual islands
Location: Maine (coastwide)	**Target Species:** Common Tern, Roseate Tern, Arctic Tern, Black Guillemot, Leach's Storm-Petrel
Timeline: Immediately	**Lead Organization:** USFWS
Activity: Education	

Partner Organizations: MDIFW / NAS / MCHT / TNC / various land trusts

Costs: $70,000 / year

Current Support:

Unfunded:

Potential Sources: To be determined

8	**Program/Project Name:** Tern Restoration Project in the Gulf of Maine	**Submitted by:** Linda Welch

Implementation Priority:

Rationale: Despite significant progress over the past 20 years toward the recovery of Common, Arctic, and Roseate Terns in the Gulf of Maine, additional colonies need to be established. Currently in Maine, over 75% of the terns are nesting on five islands. Fewer than 5% of Common and Arctic Terns currently nest on an island that is not actively managed by one of the members of the Gulf of Maine Seabird Working Group (i.e. seasonal technicians controlling predators). Over 95% of the endangered Roseate Terns are nesting on two islands, and the 2004 population total for Maine Roseate Terns is 30% lower than in 2003 (60% lower than 2002). The USFWS Recovery Plan for Roseate Terns has a goal of six colonies supporting over 200 pairs of roseates. The largest colony in Maine now supports 109 pairs of roseates.

Objectives:	**Deliverables:**
• Establish six additional tern restoration projects in Maine • Increase the geographic distribution of tern colonies in Maine • Achieve and maintain a productivity level of 1.0 fledged young / pair • Reduce or eliminate predation on the managed tern colonies	• Establishment of six additional tern restoration projects. • Minimized potential for catastrophic events at a particular island from adversely affecting a significant percentage of the population
Location: Coast of Maine (initial emphasis on downeast region and Blue Hill Bay area)	**Target Species:** Common Tern, Arctic Tern, Roseate Tern, with potential for Razorbill, Atlantic Puffin, Black Guillemot, Leach's Storm-Petrel
Timeline: Over the next 15 years	**Lead Organization:** USFWS / NAS / MDIFW
Activity: Management	

Partner Organizations: To be determined

Costs: For each restoration project: $10,000 in Year 1 for staff and equipment, with approximate cost of $7,500 each year following

Current Support:

Unfunded:

Potential Sources: To be determined

9	**Program/Project Name:** Colonial Waterbird Habitat and Productivity Enhancement Through Selective Predator Removals in Virginia	**Submitted by:** Barry Truitt

Implementation Priority:

Rationale: In response to a well documented increase in invasive raccoon and introduced red fox populations on the Virginia barrier islands and a corresponding decrease in nesting colonial waterbird and shorebird populations, The Nature Conservancy initiated a program of research and selective predator management in 1999. The initial focus was expanded in 2004 to include waterfowl and marsh species, resulting in an overall all-bird approach. Predator removals on selective islands are conducted by USDA/WS. Research efforts to date have included quarterly predator track surveys, mark-and-release studies, telemetry, translocations, artificial nest studies and DNA analysis to identify predator movements and pathways, and field evaluations of control options. Piping Plover and American Oystercatcher productivity and colonial waterbird nesting surveys on the islands have been used as measures of success. This research has shown that selective predator control is a viable option to enhance shorebird, waterfowl, and colonial waterbird habitat and productivity on the barrier islands. While continuing the program of extensive monitoring of predator distribution and abundance, selective removals, and waterfowl and shorebird productivity monitoring, we would now like to incorporate colonial waterbird productivity studies. The VA barrier island system hosts nearly 75% of the breeding colonial waterbirds in the coastal plain of VA. We would also like to conduct a field test of a remaining non-lethal management technique, conditioned taste avoidance (CTA). The VA barrier islands represent the ideal conditions for testing the utility of CTA of bird eggs as a tool for reducing predator impact on colonial waterbird productivity through behavior modification. DNA analysis to date has identified three major pathways that both raccoon and red fox use to access the islands from expanding populations on the mainland. This raises the question of the long term sustainability of the removal program (i.e. removals will need to be on-going and annual).

Objectives:	**Deliverables:**
• Continue partnership approach to deal with predator impacts on breeding birds • Continue program of selective predator removals • Continue monitoring program of predator distribution and abundance • Assess CTA as a viable non-lethal management technique • Begin program of seasonal colonial waterbird surveys and productivity monitoring on the islands as a measure of success (one .5 FTE) • Work with USDA/WS and others to fund WS staff position dedicated to the Eastern Shore • Assess program sustainability (how to get biggest bang for the buck)	• Seasonal colonial waterbird surveys coupled with selective, comprehensive productivity studies • Seasonal reports on predator removals. • Annual report on predator distribution and abundance (quarterly surveys) • Assessment of CTA as non-lethal management tool • Develop specific recommendations to address program sustainability
Location: Virginia barrier islands	**Target Species:** Black Skimmer, Least Tern, Common Tern, Royal Tern, Shorebirds, Waterfowl
Timeline: Initiated 1999; on-going	**Lead Organization:** Nature Conservancy/ Virginia Coast Reserve
Activity: Management, Monitoring and Research	

Partner Organizations: Major: USFWS, USDA Wildlife Services, VA Department of Game & Inland Fisheries, VA Museum of Natural History, Utah State University, College of William & Mary (Center for Conservation Biology), Delta Waterfowl, Nature Conservancy/Virginia Coast Reserve. Minor: USDA Natural Resources Conservation Service, VA Department of Conservation & Recreation (Division of Natural Heritage), VA Department of Environmental Quality (Coastal Resource Management Program).

Costs: 2005: Mammal Research $50K, Predator Removal $50K, CW Bird Productivity Monitoring $35K

Current Support: 2004: Mammal Research - $20K from DEQ/CRM, $52K from TNC; Predator Removals - $10K from NRCS/WHIP, $40K from TNC; CW Bird Productivity Monitoring - $0

Unfunded: All 2005 costs

Potential Sources: State Wildlife Grant, DEQ/CRM, NRCS/WHIP, Private Lands Stewardship Grant ?

10	**Program/Project Name:** Colonial Waterbird Disturbance Management Program	**Submitted by:** Barry Truitt

Implementation Priority:

Rationale: The Virginia Eastern Shore is poised to undergo a rapid increase in high density residential and second home development with a whole new fleet of boats and largely unaware island visitors headed to the barrier island beaches for recreation. In addition, eco-tourism is rapidly developing and uncontrolled at present. The result is annual increases in the number of island visitors during the breeding season of both beach nesting shorebirds and colonial waterbirds. The Virginia barrier island system annually hosts nearly 75% of the breeding colonial waterbirds found on the coastal plain of Virginia. The partners in the VA Coastal Avian Partnership (USFWS, VDGIF, USGS/PWRC, TNC, DCR/Natural Heritage, avian researchers, etc.) have agreed to meet during the winter of 2004 to discuss a coordinated approach to island visitation and prevention/reduction of impacts to birds from humans (and their dogs) on all the islands under their respective control. Education and outreach efforts targeted at island visitors and other stakeholders need to be developed and implemented before disturbance and violations occur. Capacity needs to be developed for posting, patrol, enforcement, and education.

Objectives:

- Collaborate (multi-agency) to assess risks to breeding colonial waterbirds from human disturbance
- Develop policies to reduce/ eliminate impacts
- Identify high risk colony sites
- Develop capacity to post, protect, and patrol nesting and roost sites
- Develop outreach materials to inform island visitors and other stakeholders

Deliverables:

- Risk assessment and policies to reduce/eliminate impacts from human disturbance
- Increased capacity to post, protect, and patrol nesting colonial waterbirds
- Outreach materials (i.e. brochures) to be used in stakeholder education

Location: The Virginia barrier islands (TNC, USFWS, DCR, and VDGIF ownership)

Target Species: Black Skimmer, Least Tern, Common Tern, Royal Tern, Gull-billed Tern, Piping Plover, American Oystercatcher, Wilson's Plover

Timeline: Annual and on-going

Activity: Management and Education

Lead Organization: The Nature Conservancy/Virginia Coast Reserve

Partner Organizations: U.S. Fish & Wildlife Service, VA Department of Game & Inland Fisheries, VA Department of Conservation & Recreation, VA Department of Environmental Quality/Coastal Resource Management Program, USGS/PWRC, College of William & Mary/Center for Conservation Biology, University of VA-VCR/LTER, other academic researchers

Costs: $50K/year including salaries and benefits (one .5 FTE to be shared with one .5 FTE to monitor productivity under the selective removal program), equipment, boat and other travel, educational and outreach materials, etc.

Current Support: None

Unfunded: $50K

Potential Sources: State Wildlife Grant, DEQ/CRM program, private donations

11	**Program/Project Name:** Partnerships for Improved Waterbird Management in Narragansett Bay	**Submitted by:** Carol Trocki Andrew MacLachlan

Implementation Priority:

Rationale: There exists a strong desire to maintain a 25-year dataset of nesting colony numbers, and a need to balance public access with nesting habitat management. This project would present an opportunity to raise awareness of Narragansett Bay resources.

Objectives:	**Deliverables:**
• Describe current management efforts on NB nesting islands; • Discuss best management practices & resources needed; • Develop a plan to implement comprehensive management strategy on State-owned Islands; • Identify priorities for monitoring, management, and public outreach.	• A comprehensive plan for management, monitoring, and public outreach • A network of collaborating organizations working toward waterbird conservation
Location: Narragansett Bay, Rhode Island	**Target Species:** Great Blue Heron, Little Blue Heron, Green Heron, Black-crowned Night-Heron, Cattle Egret, Great Egret, Snowy Egret, Great Black-backed Gull, Herring Gull, Double-crested Cormorant
Timeline: 2005-7	**Lead Organization:** Rose Island Lighthouse Foundation?
Activity: Management and Education	

Partner Organizations: Narragansett Bay Estuary Program, Rhode Island Department of Environmental Management, Narragansett Bay National Estuarine Research Reserve, Audubon Society of Rhode Island, US Fish and Wildlife Service, University of Rhode Island, Dick Ferren

Costs: To be determined

Current Support: None

Unfunded:

Potential Sources: RI Department of Environmental Management? USFWS? Others?

12	**Program/Project Name:** Coastal Seabird/ Human Disturbance Campaign	**Submitted by:** Jenny Dickson

Implementation Priority:

Rationale: Disturbance of nesting sites is a limiting factor for many priority waterbirds. Colonial waterbirds are concentrated in coastal resources fragmented by humans, by coastal development, and various other factors.

Objectives:	**Deliverables:**
• Determine what type and level of recreation is compatible with beach nesting • Develop and implement an outreach program to encourage recreational sharing of the beach with coastal seabirds • Train local stewards	• Intern stewards • Educational materials • Multiregional Public Service Announcements • Evaluate effectiveness
Location: Southern New England/Long Island Sound	**Target Species:** Black Skimmer, Common Tern, Double-crested Cormorant, Foster's Tern, Great Black-backed Gull, Gull-billed Tern, Herring Gull, Laughing Gull, Least Tern, Roseate Tern
Timeline: 2005 - 2007	**Lead Organization:**
Activity: Education and Management	

Partner Organizations: States; NGOs

Costs: Interns; overall cost to be determined

Current Support:

Unfunded:

Potential Sources: States; NGOs; foundations; USFWS

13	**Program/Project Name:** Seabird Ecological Assessment Network (SEANET)	**Submitted by:** Becky Harris

Implementation Priority:

Rationale: Beached bird surveys involve students and the public in data collection on baseline mortality of marine and coastal birds, as well as detecting unusual mass mortality events. Chronic oiling is a threat to seabirds in Atlantic Canada, but this risk to birds in the eastern US has not been assessed. Other threats can be evaluated, such as harmful algal blooms, contaminant distribution at a high trophic level, entanglement and marine debris ingestion, and disease incidence. The inclusion of fisheries bycatch analysis and pelagic population information will contribute to the identification of priority management issues. The planned distributed internet mapping system will enable managers, researchers, and the public to access geographic and temporal data on seabird mortality, population distribution, and underlying threats.

Objectives:	**Deliverables:**
• Develop standardized volunteer-based beached bird survey (monitoring mortality) • Develop a distributed Internet database and mapping application • Monitor seabird bycatch in fisheries operations, collecting specimens obtained by fisheries observers to develop a standard pathology for these birds, and analyze samples for baseline contaminants and disease information	• Beached bird inventory • Internet database and mapping application, which will provide a comprehensive and integrated source allowing users to correlate multiple environmental variables and risk factors with population fluctuations and mortality events
Location: Northeastern US coast and Atlantic Canada (Delaware Bay north; could be expanded southward in the future)	**Target Species:** seabirds, waterfowl, shorebirds
Timeline: Initiated fall 2002; long-term	**Lead Organization:** Tufts University
Activity: Monitoring, Research and Education	

Partner Organizations: Maine Audubon and chapters, ReMaine Wild, Maine Department of Inland Fisheries and Wildlife, Quebec Labrador Foundation, New Hampshire Nongame and Endangered Wildlife Program, National Audubon Society Seabird Restoration Project, Lloyd Center for Environmental Studies, Manomet Center for Conservation Sciences, Massachusetts Audubon Society, Massachusetts Division of Fisheries and Wildlife, MA Bird Observer, Cape Wildlife Center, Wild Care, U.S. Fish and Wildlife Service, U.S. Environmental Protection Agency, National Marine Fisheries Service, National Biological Information Infrastructure, U.S. Geological Survey, U.S. National Park Service, MA Dept. of Coastal Zone Management, The Nature Conservancy, Connecticut Audubon Society, Bird Studies Canada, Environment Canada, Wildlife Trust, Volunteers for Wildlife, New Jersey Audubon Society, Cape May Bird Observatory, Stockton State College, The Wetlands Institute, Rutgers University, New Jersey Division of Fish and Wildlife, Wild Wings Wildlife Rehabilitation Center, TriState Bird Research and Rescue, Inc., NY State Department of Environmental Conservation, Wildlife Rescue Center of the Hamptons, Riverhead Foundation for Marine Research and Preservation, Coastal Research and Education Society of Long Island, NY State Parks Department, NY State Office of Parks, Recreation, and Historic Preservation, NY City Parks Department, NY City Audubon Society

Costs: $254,750 total project cost per year

Current Support: fall 2004 - fall 2005: NOAA Coastal Services Center GIS Integration & Development grant $82,226 and $45,000 remaining from National Fish and Wildlife Foundation = $127,226 (Current Support through fall 2004: Geraldine R. Dodge Foundation $49,100 and Lynn Trayser Mitchell Memorial Bird Fund $14,000)

Unfunded: $127,524 (fall 2004 – fall 2005)

Potential Sources: State Wildlife Grant, NSF – Research Communication Network

14	**Program/Project Name:** Land Acquisition/Seabird Restoration in Coastal Maine	**Submitted by:** Brad Allen

Implementation Priority:

Rationale: The island is both privately owned and unprotected. There is a large petrel colony on the island, as well as nesting eiders.

Objectives: • Tern restoration • Land acquisition	**Deliverables:** • Permanently protected critical nesting habitats
Location: Wooden Ball Island, Maine	**Target Species:** Black Guillemot, Herring Gull, Leach's Storm-Petrel, Great Black-backed Gull, Arctic Tern, Common Eider
Timeline: To be determined	**Lead Organization:** Maine Department Inland Fisheries & Wildlife
Activity: Research and Acquisition	

Partner Organizations: USFWS, Maine Coast Heritage Trust, National Audubon, others

Costs: To be determined

Current Support:

Unfunded:

Potential Sources: To be determined

15	**Program/Project Name:** Great Spoon Island Inventory	**Submitted by:** Brad Allen

Implementation Priority:

Rationale: Great Spoon Island is one of the few tern islands without tern researchers managing predators.

Objectives:	**Deliverables:**
• Inventory	• The assessment of abundance of nesting seabirds
Location: Great Spoon Island, Maine	**Target Species:** Arctic Tern, Common Tern, Leach's Storm-Petrel, Razorbill, Great Cormorant, Common Eider
Timeline: To be determined	**Lead Organization:** Maine Department of Inland Fisheries and Wildlife
Activity: Research	

Partner Organizations: USFWS; Maine Coast Heritage Trust; Gulf of Maine Seabird Working Group

Costs: To be determined

Current Support: State ownership; census paid by Maine Department of Inland Fisheries and Wildlife

Unfunded:

Potential Sources: To be determined

16	**Program/Project Name:** Little Libby Seabird Restoration Project	**Submitted by:** Brad Allen

Implementation Priority:

Rationale: Spread out the "risk". Little Libby Island is owned by USFWS and Big Libby Island by MDIFW (state).

Objectives:	**Deliverables:**
• Restore terns and alcids	• Established nesting of additional island colony sites
Location: Little Libby Island & Big Libby Island, Maine	**Target Species:** Arctic Tern, Roseate Tern, Razorbill, Atlantic Puffin, Leach's Storm-Petrel, Common Eider
Timeline: Within 10 years	**Lead Organization:** US Fish and Wildlife Service
Activity: Research	

Partner Organizations: State, National Audubon

Costs: Check with FWS on costs

Current Support: US Fish and Wildlife Service (owner)

Unfunded:

Potential Sources: To be determined

17	**Program/Project Name:** Black Guillemot Nesting Habitat Project	**Submitted by:** John Anderson

Implementation Priority:

Rationale: Great Duck Island, Maine may support the largest breeding colony of Black Guillemots in the Lower 48.

Objectives:	**Deliverables:**
• Analyze and categorize Black Guillemot nesting habitat	• Quantified dataset and map of good nesting habitat for Black Guillemots on Great Duck Island
Location: Great Duck Island, Maine	**Target Species:** Black Guillemot
Timeline: To be determined	**Lead Organization:** College of the Atlantic
Activity: Research	

Partner Organizations:

Costs: To be determined

Current Support: This is a current graduate project.

Unfunded:

Potential Sources: To be determined

<table>
<tr><td>18</td><td>Program/Project Name: Gull Population Biology Project</td><td>Submitted by:
John Anderson</td></tr>
<tr><td colspan="3">Implementation Priority:</td></tr>
<tr><td colspan="3">Rationale: Since the initiation of active management of gull populations, very little has been done to monitor and keep up with what is going on either within or between populations. The last attempt at a coast-wise survey occurred around 1996, and there is likely no current monitoring of productivity at colonies.</td></tr>
<tr><td colspan="2">Objectives:

• Collect ongoing data on the population biology and productivity of Herring Gulls and Great Black-backed Gulls</td><td>Deliverables:

• Bi-annual report</td></tr>
<tr><td colspan="2">Location: Great Duck Island, Maine</td><td>Target Species: Herring Gull, Great Black-backed Gull</td></tr>
<tr><td colspan="2">Timeline: Ongoing; long-term</td><td rowspan="2">Lead Organization: College of the Atlantic</td></tr>
<tr><td colspan="2">Activity: Research and Management</td></tr>
<tr><td colspan="3">Partner Organizations: Inland Fish & Wildlife Service; The Nature Conservancy</td></tr>
<tr><td colspan="3">Costs: To be determined</td></tr>
<tr><td colspan="3">Current Support:</td></tr>
<tr><td colspan="3">Unfunded:</td></tr>
<tr><td colspan="3">Potential Sources: To be determined</td></tr>
</table>

19	**Program/Project Name:** Leach's Storm-Petrel Monitoring Project	**Submitted by:** John Anderson

Implementation Priority:

Rationale: Great Duck Island, Maine supports one of the largest colonies of Leach's Storm-Petrels in the continental United States. In 2002, wireless sensor networks were deployed on Great Duck Island to monitor the microclimates in and around nesting burrows used by the Leach's Storm-Petrel. These networks allow researchers to access real-time environmental data over the Internet.

Objectives:	**Deliverables:**
• Develop monitoring techniques • Gain better understanding of Leach's Storm-Petrel habitat requirements • Test remote-sensor technology	• Habitat monitoring kit that enables researchers worldwide to engage in the non-intrusive and non-disruptive monitoring of sensitive wildlife and habitats
Location: Great Duck Island, Maine	**Target Species:** Leach's Storm-Petrel
Timeline: Initiated 2002; ongoing	**Lead Organization:** College of the Atlantic
Activity: Research, Management and Monitoring	

Partner Organizations: Intel Research Laboratory at Berkeley, University of California at Berkeley**,** The Nature Conservancy, state (landowner)

Costs: To be determined

Current Support: Intel

Unfunded:

Potential Sources: To be determined

<table>
<tr><td>20</td><td>Program/Project Name: At-Sea Monitoring of Pelagic Waterbirds</td><td>Submitted by:
Tom Hodgman</td></tr>
<tr><td colspan="3">Implementation Priority:</td></tr>
<tr><td colspan="3">Rationale: Seabird abundance information is lacking, and what pelagic data exist are approximately 20 years old. At certain times of the year, large numbers of birds are vulnerable to at-sea oil spills, and certain commercial fishing practices.</td></tr>
<tr><td colspan="2">Objectives:

• Determine offshore areas of high concentration of priority pelagic species through surveys (ship-board; transects)</td><td>Deliverables:

• Atlas to identify waterbird density

• GIS layer for integration with other marine data</td></tr>
<tr><td colspan="2">Location: NW Atlantic continental shelf (Gulf of Maine; NY Bight, etc)</td><td>Target Species: Pelagic species: Audubon’s Shearwater, Bonaparte’s Gull, Bridled Tern, Cory’s Shearwater, Dovekie, Glaucous Gull, Greater Shearwater, Great Skua, Iceland Gull, Little Black-backed Gull, Little Gull, Long-tailed Jaeger, Manx Shearwater, Northern Fulmar, Parasitic Jaeger, Pomarine Jaeger, Sabine’s Gull, Sooty Shearwater, South Polar Skua, Wilson’s Storm-Petrel</td></tr>
<tr><td colspan="2">Timeline: Should be year-round (perhaps only the summer to start)</td><td rowspan="2">Lead Organization: Need one (perhaps a subcommittee within MANEM? USFWS?)</td></tr>
<tr><td colspan="2">Activity: Monitoring; Research; Management</td></tr>
<tr><td colspan="3">Partner Organizations: Potential with coastal states, USFWS, NGOs and others (NMFS?)</td></tr>
<tr><td colspan="3">Costs: To be determined</td></tr>
<tr><td colspan="3">Current Support: None</td></tr>
<tr><td colspan="3">Unfunded: All</td></tr>
<tr><td colspan="3">Potential Sources: Largely federal waters: USFWS, NMFS, etc.</td></tr>
</table>

21	**Program/Project Name:** Inventory of Inland Heronries	**Submitted by:** Tom Hodgman

Implementation Priority:

Rationale: Existing data are 10-20 years old and may not reflect current population status or distribution. An increasing eagle population may be causing the break-up of coastal colonies, and the effects on inland colonies are unknown.

Objectives:	**Deliverables:**
• Conduct an aerial census of inland heronries throughout Maine.	• Atlas of nesting locations and abundances of inland herons
Location: Maine (at least)	**Target Species:** Great Blue Heron
Timeline: To be determined	**Lead Organization:** To be determined
Activity: Research and Monitoring	

Partner Organizations: None to date

Costs: To be determined

Current Support: None

Unfunded:

Potential Sources: State Wildlife Grant

22	**Program/Project Name:** Inland Waterbird Habitat Protection Analysis	**Submitted by:** Tom Hodgman

Implementation Priority:

Rationale: Many prime sites, but not all, are already in conservation ownership. Developing a database of these and other important (unprotected) sites is needed before acquisition efforts commence. Analysis of key sites is necessary to guide an acquisition program.

Objectives:	**Deliverables:**
• Analyze status (ownership, threats) of key inland wetland sites • Identify protection measures to guide management and acquisition	• Database of unprotected sites • Threats analysis • Acquisition recommendations
Location: Inland waterbird sites (Maine and perhaps other states)	**Target Species:** Virginia Rail, Sora, American Bittern, Least Bittern, Great Blue Heron, Green Heron, Pied-billed Grebe
Timeline: 1 year	**Lead Organization:** Maine Department of Inland Fisheries and Wildlife
Activity: Management and Acquisition	

Partner Organizations: State (ME); TNC; Land Trusts (potential)

Costs: To be determined

Current Support:

Unfunded: All

Potential Sources: State agencies, other

23	**Program/Project Name:** Regional Source/Sink Dynamics of Black Tern Populations	**Submitted by:** Tom Hodgman, Fred Servello
Implementation Priority:		
Rationale: After two successful M.S. projects on this species in Maine, this is the last major conservation question.		
Objectives: • Investigate the relationship of state and provincial populations of Black Terns to the regional population • Determine how much effort should be placed on management for Black Terns in Maine • Determine to what degree state-specific management will affect local vs. regional populations	**Deliverables:** • Analysis of metapopulation dynamics • Management recomendation	
Location: Maine and neighboring states and provinces	**Target Species:** Black Tern	
Timeline: To be determined	**Lead Organization:** To be determined	
Activity: Research and Management		
Partner Organizations: To be determined		
Costs: To be determined		
Current Support:		
Unfunded:		
Potential Sources: To be determined		

24	**Program/Project Name:** Population and Habitat Ecology of Marshbirds in Maine	**Submitted by:** Tom Hodgman, Fred Servello, Cyndy Loftin

Implementation Priority:

Rationale: There is a large body of both historical and recent occurrence data available**.** Anecdotal evidence points to declines of several species of concern**,** and several species currently of special concern may warrant state listing and recovery.

Objectives:	**Deliverables:**
• Determine species/habitat relationships for marshbirds, emphasizing those of conservation concern • Determine temporal trends in wetland occupancy by marshbirds in Maine • Determine habitat use and breeding status of selected marshbirds of special concern	• Analysis of marshbird use of Maine wetlands • Status assessment of marshbirds in Maine
Location: Maine	**Target Species:** Virginia Rail, Sora, American Bittern, Least Bittern, Great Blue Heron, Green Heron, Pied-billed Grebe, American Coot, Common Loon, Common Moorhen
Timeline: 2005-2007	**Lead Organization:** University of Maine, Maine Coop Unit
Activity: Research	

Partner Organizations: Maine Department Inland Fish and Wildlife

Costs: To be determined

Current Support:

Unfunded:

Potential Sources: To be determined

25	**Program/Project Name:** Development and Distribution of a Field Guide to Beached Birds (Dead) for the North Atlantic	**Submitted by:** Doug Forsell

Implementation Priority:

Rationale: Beached bird surveys are an established method of collecting baseline date on mortality of marine birds. They have been used to assess mortality events from oil spills, disease outbreaks, bycatch in fishing gear, and starvation from natural sources such as El Nino events. One of the most important tools necessary to carry out beached bird surveys is a good field guide to dead birds since most surveys are conducted by volunteers who may start out with limited dead bird identification skills. Existing field guides to live birds are often inadequate because specimens may be in various states of decay, thus key features that persist in decayed birds such as bills and feet are highlighted by a beached bird guide. The National Marine Fisheries Service will also provide the guide to their fisheries observers to use in identifying dead birds found in fisheries bycatch. The Coastal Observation and Seabird Survey Team (COASST) from Seattle, WA, will undertake the production of the Atlantic Beached Bird Survey Field Guide. COASST has already produced a high-quality guide to beached birds of Washington and Oregon.

Objectives:	**Deliverables:**
• Develop, print, and distribute a beached bird guide for North Atlantic marine birds that will be a lasting educational and practical resource for volunteers, government agencies, non-profit organizations, and oil spill response teams.	A beached bird field guide that will: • be printed on waterproof paper for use in the field • consist of a "key" to dead birds based primarily on foot type, a wing table and life-sized bill overlays in addition to pictures of dead birds • include standardized techniques and data forms
Location: Northeast States and Atlantic Maritime Provinces	**Target Species:** seabirds
Timeline: 2004-2005	**Lead Organization:** University of Washington
Activity: Management and Assessment	

Partner Organizations: University of Washington, State of Massachusetts, NMFS, Environment Canada, NMFS, several others

Costs: Development of guide: $100,000

Current Support: Environment Canada, State of Mass, European Union, NMFS, University of Washington have provided a major portion of $100,000

Unfunded: Printing and distribution costs: $30,000

Potential Sources: State Wildlife Grants, Oil spill restoration funds, USFWS

26	**Program/Project Name:** Citizen Science Network for Beached Bird Surveys	**Submitted by:** Doug Forsell

Implementation Priority:

Rationale: Beached bird surveys are an established method of collecting baseline date on mortality of marine birds. They have been used to assess mortality of birds from oil spills, disease outbreaks, bycatch in fishing gear, and starvation from natural sources such as El Nino events. As data sets become available they will be become increasingly important in damage assessments from spills, and used by a variety of managers to assess health of bird communities.
Beached marine mammals and turtles will also be recorded and reported to the appropriate sources, increasing NMFS database of strandings. These surveys are being conducted to detect high-mortality events (such as disease outbreaks and oil spills) and to establish baseline data on coastal aquatic bird mortality.

Objectives:	**Deliverables:**
• Develop a network of citizen scientists, state and federal biologists to conduct regular beached bird surveys along the Northeast coast of the US • Train some surveyors to conduct shorebird and seabird surveys • Have volunteers enter data directly on the web, allowing for quick compilation of results •	• Web-based searchable database containing baseline data and information on mortality events (to be housed at the National Biological Information Infrastructure, USGS)
Location: Northeast and Mid-Atlantic Coastal States (BCR 30)	**Target Species:** Marine birds
Timeline: 2004 – 2005 for initiation	**Lead Organization**: Seabird Ecological Assessment Network (SEANET), or other NGOs, or USFWS and USGS
Activity: Management and Assessment	

Partner Organizations: State of Mass, Canadian Wildlife Service, USFWS, USGS, National Park Service, State Wildlife agencies

Costs: Volunteer Manager, data management, and operating expenses: $80,000 per year

Current Support: Some surveys underway at some parks, refuges, and NGO's etc.

Unfunded: All

Potential Sources: State Wildlife Grants, oil spill restoration funds, USFWS, USGS, NMFS, USCG

27	**Program/Project Name:** Waterbird Bycatch: Assessment and Management for Elimination/Reduction to Minimal Levels	**Submitted by:** Doug Forsell

Implementation Priority:

Rationale: Effective data collection and monitoring through observer programs is expensive. Buyouts are easier in states with limited entry, and legal action may be necessary in others (e.g. NFWF bought Norwegian salmon rights; ASMFC eliminated shad intercept fishery). There is a need to work with fishers for equitable settlement. Fisheries agencies should be researching bycatch reduction techniques.

Objectives:	**Deliverables:**
• Conduct a risk assessment based on available bycatch data, data on gear type/bird interactions, current fisheries and gear types and methods, and known bird distributions to target fisheries likely to have high bird mortality • Determine quantity and species of birds caught in bycatch • Fund incentives or measures to reduce bycatch (through gear or fishing technique modification), or eliminate fishery (through legislation or buyouts) if bycatch cannot be mitigated	• Identification of fisheries with high bird mortality • Bycatch reduction/elimination • Changes in fisheries practices/gear • More effective implementation of legislation
Location: BCR 30 (all states)	**Target Species:** Audubon's Shearwater, Cory's Shearwater, Greater Shearwater, Manx Shearwater, Sooty Shearwater, Northern Gannett, Common Loon, Red-throated Loon, Brown Pelican
Timeline: 2005 - 2010	**Lead Organization:** State agencies through ASMFC, Federal agencies in federal waters
Activity: Management and Assessment	

Partner Organizations: NMFS, USFWS, ASMFC, Mid-Atlantic Fisheries Management Council, New England Fisheries Management Council, Ducks Unlimited, etc.

Costs: One person/year to perform risk assessment; $100,000-$500,000 to assess a fishery with observers; $25,000-millions to buy out fisheries

Current Support: USFWS Bycatch Elimination Policy; NMFS (where mammal and turtle bycatch occur in the same fisheries); NMFS and some states collect data on bird bycatch, but do not systematically analyze them.

Unfunded: All

Potential Sources: State Wildlife Grants, Oil spill restoration funds, Ducks Unlimited, USFWS

28	**Program/Project Name:** Pelagic Waterbird Distribution and Abundance Database	**Submitted by:** Doug Forsell

Implementation Priority:

Rationale: The distribution and abundance of waterbirds including seaducks, diving ducks, loons, and seabirds along the Atlantic States is largely unknown beyond a few hundred meters from shore. Some data from standardized shipboard surveys of waterbirds from the late 1970's and early 80's exists. Some data is available in digital form and other data exists only in paper files. Other data from bird watching trips since the 1970's exists and in some cases may be the only data for distribution of rare birds or for some geographic areas. These data are needed now to influence coastal activities, and the sources will be lost as time goes on.

Objectives:	**Deliverables:**
• Pull together existing waterbird shipboard and aerial data sets for the northern U.S. Atlantic seaboard and incorporate them into a GIS for easy access (similar projects are currently underway in Alaska and on the west coast) • Purchase and enter data, and reformat existing digital data • Produce and distribute an interactive CD for government and public use	• GIS database • Interactive CD
Location: U.S. Atlantic waters to 200 nm (offshore of BCR 30)	**Target Species:** Black-legged Kittiwake, Sooty Shearwater, Audubon's Shearwater, Parasitic Jaeger, Cory's Shearwater, Great Skua, Pomarine Jaeger, Long-tailed Jaeger, Wilson's Storm-Petrel, Leach's Storm-Petrel, Greater Shearwater, Manx Shearwater, South Polar Skua, Common Loon, Red-throated Loon, Black Guillemot, Black-headed Gull, Bonapart's Gull, Bridled Tern, Common Murre, Double-crested Cormorant, Foster's Tern, Glaucous Gull, Great Black-backed Gull, Great Cormorant, Herring Gull, Horned Grebe, Iceland Gull, Northern Fulmar, Northern Gannett, Razorbill, Ring-necked Grebe, Roseate Tern, Sabine's Gull, Thick-billed Murre, diving ducks, and seaducks
Timeline: 1-3 years **Activity:** Research and management	**Lead Organization:** USFWS or MMS or NMFS or NOAA

Partner Organizations: USFWS, MMS, NMFS, various state wildlife agencies

Costs: $150,000 per year for two years for historical data acquisition and formatting

Current Support: None

Unfunded: $300,000

Potential Sources: State Grants, MMS, USFWS, Wind Industry

29	**Program/Project Name:** Verification and Completion of North Atlantic Coastal and Marine Waterbird Database	**Submitted by:** Doug Forsell Steering Committee

Implementation Priority:

Rationale: Without data on the distribution and abundance of birds, we are unable to influence activities in coastal waters such as: identifying areas where high bycatch of birds might occur, commenting on nearshore development projects, conducting damage assessments from spills, and planning for and responding to spills. Currently, coastal shoals to 12 miles offshore are being proposed for mining of sand for beach replacement projects and the placement of wind turbines for energy production. With the limited data available, biologists cannot determine what the value of shoal areas are to migratory birds nor are we able to suggest alternative areas for development where impacts to birds might be mitigated. Many of the species in these waters are thought to have declining populations including, scoters, long-tailed ducks, and loons. Most of the data on offshore distribution and abundance of waterbirds is from the late 1970's and early 80's. Another project will pull this data into a comprehensive digital database.

Objectives:

- Determine where seasonal or geographic gaps in the data exist (expected to be over 50 % of the area)
- Conduct aerial or shipboard surveys of the Continental Shelf waters prioritizing shallow water areas, which are currently under pressure for development and are usually not surveyed by large ships from which most existing data was collected.
- Compare historical data with new data to determine for which species and geographical areas historical data are still applicable.

Deliverables:

Location: U.S. Atlantic waters to 200 nm. (offshore of BCR 30)

Target Species: Black-legged Kittiwake, Sooty Shearwater, Audubon's Shearwater, Parasitic Jaeger, Cory's Shearwater, Great Skua, Pomarine Jaeger, Long-tailed Jaeger, Wilson's Storm-Petrel, Leach's Storm-Petrel, Greater Shearwater, Manx Shearwater, South Polar Skua, Common Loon, Red-throated Loon, Black Guillemot, Black-headed Gull, Bonapart's Gull, Bridled Tern, Common Murre, Double-crested Cormorant, Foster's Tern, Glaucous Gull, Great Black-backed Gull, Great Cormorant, Herring Gull, Horned Grebe, Iceland Gull, Northern Fulmar, Northern Gannett, Razorbill, Ring-necked Grebe, Roseate Tern, Sabine's Gull, Thick-billed Murre, diving ducks, and seaducks

Timeline: 2006-2008

Activity: Research and Monitoring

Lead Organization: USFWS, USGS, NOAA, or NMFS

Partner Organizations: USFWS, USGS, NOAA. coastal States

Costs: 100K for statistical analysis and evaluation of data; 150-250K/year for surveys of data gaps, but could easily be $500k per year if multiple areas are surveyed in the same year.

Current Support: None

Unfunded: 250-500K year

Potential Sources: MMS, FWS, NMFS, NOAA

30	**Program/Project Name:** Mortality and Sub-lethal Effects of Offshore and Coastal Wind Power Facilities on Waterbirds	**Submitted by:** Doug Forsell

Implementation Priority:

Rationale: Wind energy is a rapidly growing energy source in the U.S. However, there are concerns over the potential threat to waterbirds from wind power facilities. Wind energy facilities may cause bird mortality from collisions and/ or avoidance of facilities and surrounding habitat.

Objectives:	**Deliverables:**
• Conduct an independent assessment of the effects of bird strikes and displacement at wind power facilities on waterbirds • Design and conduct new or independent surveys to evaluate if data being collected is accurate and reflects the actual effects of wind power facilities on waterbirds • Draw from current and past waterbird surveys to identify important bird areas. (Use technical data from European studies and from U.S. facilities as they come online)	• Map of IBA sites that may conflict with new wind energy sites • Updated dataset on effects of wind power facilities on birds • Conservation plan to guide to placement of new wind power sites
Location: All NE Maritime states (BCR 30)	**Target Species:** all waterbirds, some neotropical migrants
Timeline: 2006 - 2010 **Activity:** Research and Management	**Lead Organization:** MMS, NMFS, NOAA, FWS (all unconfirmed)

Partner Organizations: MMS, NMFS, NOAA, FWS, DOE (all unconfirmed), all NE Maritime states. This type of project would require multi-state application, integration of wind power developers monitoring data, independent assessments, and communication with European biologists.

Costs: $100,000 per year for each study ($300,000)

Current Support: None

Unfunded: $100,000-$400,000

Potential Sources: State Wildlife Grant, Federal lease revenues, DOE, DOI, wind energy developers

31	**Program/Project Name:** Wading Bird Productivity	**Submitted by:** Patrick Comins

Implementation Priority:

Rationale: A better understanding of productivity trends in wading birds would be helpful in determining population dynamics and which potential sites should be priorities for acquisition and/or management. The less common nesting species such as Glossy Ibis, Little Blue Heron, and Cattle Egret seem to come and go like the wind. It would be useful to have a clearer understanding of the factors that affect the dynamics of these populations. Additionally, even the more common species, such as the Great Egret, Snowy Egret and Black-crowned Night-Heron have a history of colony abandonment with little notice. To better understand the factors behind colony abandonment would allow for improved management of existing colonies. Research has already been conducted on Great Captains Island in Greenwich and Chimon Island in Norwalk that could be incorporated into expanded research.

Objectives:	**Deliverables:**
• To better understand the dynamics of predation, human interference, and competition (i.e. deer/cormorants) in determining where wading bird colonies are and what is happening to them (i.e. the how's and why's of colony size and distribution).	• A list of existing colonies that are priority for improved management and protection • A list of priority acquisition sites
Location: Great Captains Island, Charles Island & Cockenoe Island, Connecticut	**Target Species:** Black-crowned Night Heron, Great Egret, Snowy Egret, Little Blue Heron, Glossy Ibis, Cattle Egret, Double-crested Cormorant
Timeline: Dependent upon funding	**Lead Organization:** Connecticut Audubon Society (Milan Bull). Would have to be coordinated and conducted with approval of CT DEP
Activity: Research and Management	

Partner Organizations: Connecticut Audubon Society, Manomet Center for Conservation Sciences, USFWS, Audubon Connecticut

Costs: To be determined

Current Support:

Unfunded: To be determined

Potential Sources: To be determined

32	**Program/Project Name:** Land Acquisitions to Protect Key Nesting Areas for Waterbirds in Connecticut.	**Submitted by:** Jenny Dickson Patrick Comins

Implementation Priority:

Rationale: Acquisition of these areas by the USFWS and/or Connecticut DEP will allow for improved protection and management of key nesting areas for waterbirds on Connecticut's shore of Long Island Sound. There would be much public support and support by conservation organizations for any of these acquisitions.

Objectives:

- To acquire and better manage key waterbird nesting areas. Targets (in order of priority):
  - Long & Pleasure beaches (Stratford and Bridgeport). Municipally owned
  - Menunketesuck Island (Westbrook). Privately owned.
  - Ram Island (Mystic). Privately Owned
  - Horse Island (Branford). Owned by Yale University
  - Kelsey Island (Branford): plovers and terns are relatively secure, but small numbers. Privately owned.

Deliverables:

- Permanently protected critical habitats for waterbirds in Connecticut

Location: Connecticut

Target Species: Least Tern, Green Heron, Little Blue Heron, Black-crowned Night Heron, Yellow-crowned Night-heron, Cattle Egret, Great Egret, Snowy Egret, Glossy Ibis, and Piping Plover

Timeline: Dependent on funding

Activity: Management and Funding

Lead Organization: USFWS, DEP

Partner Organizations: The Nature Conservancy, TPL, municipalities, Land Trusts?

Costs: To be determined

Current Support:

Unfunded: To be determined

Potential Sources: Land and Water Conservation Fund, North American Wetlands Conservation Act, USFWS National Coastal Wetlands Conservation Grant Program, Cooperative Endangered Species Conservation Fund, Private Donations, State monies.

33	**Program/Project Name:** Inventory of Tern Foraging and Prey Resources	**Submitted by:** Patrick Comins

Implementation Priority:

Rationale: As with all colonial-nesting waterbirds, effective conservation of terns requires not only protection and proper management of nesting colonies but also conservation and/or management of key foraging areas. Some work has been done on Roseate Tern foraging areas, but that could be expanded along with studies on feeding areas for Common Tern and Least Tern. An analysis of what the birds are eating and population dynamics of the prey base would make this information more valuable. Better understanding of foraging areas and foraging biology of terns would allow for better planning for historic colony restoration and/or work to create new colonies.

Objectives:	**Deliverables:**
• Determine key tern foraging areas and correlate with prey base analysis.	• Identification of key foraging sites for terns
Location: Long Island Sound, CT	**Target Species:** Common Tern, Least Tern, Roseate Tern
Timeline: To be determined	**Lead Organization:** American Museum of Natural History (Matthew Male)
Activity: Research	

Partner Organizations: To be determined

Costs: To be determined

Current Support:

Unfunded:

Potential Sources: To be determined

34	**Program/Project Name:** Site Specific Conservation Planning at Important Waterbird Bird Areas in Connecticut	**Submitted by:** Patrick Comins

Implementation Priority:

Rationale: Consolidating known information about key sites, as well as outlining research, monitoring, education, outreach and inventory needs and opportunities in a single document will give conservation planners a blueprint to follow in order to increase efficiency of conservation and/or research projects at each site. The conservation planning process will identify and engage potential stakeholders at each site in order to foster the formation of stewardship adoption groups at each IBA. The plans will outline conservation needs and provide a checklist to follow to ensure proper management and monitoring of key sites. Loose models for IBA conservation plans can be found at: http://www.ibacanada.com/cp.html. The initial plan will cover ~10 acres of wetland owned by the Hartford Audubon Society, but this property lies within several thousand acres of undeveloped floodplain along both sides of the Connecticut River north of Hartford. Within this area there are many wetlands of significance to waterbirds. The Sandy Point conservation plan may require additional funding if the scope is to include the adjacent Old Field Creek Marsh. There are currently 21 publicly announced IBAs in Connecticut, of which at least 12 sites have a significant waterbirds component, ranging from nesting colonies to foraging areas to fresh-water wetlands with nesting non-colonial waterbirds of conservation concern. There is a goal of having 75 publicly announced IBAs within 3 years, an unknown portion of which will have at least some waterbird component.

Objectives:	**Deliverables:**
• Determine natural resource status at IWBAs in CT • Analyze threats and opportunities for conservation • Develop a stakeholder network for each site to implement conservation strategies	• Site-specific conservation plans for IWBAs that will facilitate more efficient conservation actions that support waterbirds • Stakeholder support groups and network for CT IWBA
Location: Important Bird Areas along the CT coast	**Target Species:** Common Tern, Roseate Tern, Least Tern, Black-crowned Night-Heron, Cattle Egret, Glossy Ibis, Great Egret, Green Heron, Little Blue Heron, Snowy Egret, Yellow-crowned Night-Heron, Clapper Rail, King Rail, Sora, Least Bittern, American Bittern, Pied-billed Grebe, Virginia Rail, plovers
Timeline: Dependent on funding but three to be developed by July 2005.	**Lead Organization:** Audubon Connecticut
Activity: Management	

Partner Organizations: Various landowners and other groups with interest in sites**.**

Costs: Varies by site. Smaller, less complex sites will likely cost between $3,000-8,000/site and larger more complex sites may cost $15,000-$20,000.

Current Support: Current funding is from a private individual donor and the GE Foundation. Audubon Connecticut has funding to complete three pilot conservation plans in FY '05 (July ’04-June’05). All three IBAs proposed for conservation planning have a waterbird component. Sites proposed for conservation planning in FY '05 are Station 43 sanctuary in South Windsor, Cove Island Park in Stamford and Sandy Point in West Haven. A proposal to fund three per year over next three years is pending.

Unfunded: Additional funding would be useful to expand the scope of the conservation plan for Station 43 to include all of the Conte Special Focus Area 13.

Potential Sources: Additional sources of funding are being sought.

35	**Program/Project Name:** Determination of Key Nesting Areas for Freshwater Wetland Nesting Birds	**Submitted by:** Patrick Comins

Implementation Priority:

Rationale: More accurate and precise inventories are needed to determine key nesting areas for state-listed non-colonial waterbirds. While much is known about coastal colonial waterbirds, little is known about the distribution of non-colonial inland species such as the Pied-billed Grebe, American Bittern and rails. GIS-based habitat modeling combined with expanded inventory efforts would help conservation planners to better understand the distribution of these species in the state and allow for more effective conservation planning.

Objectives:	**Deliverables:**
• Determine key nesting areas for non-colonial freshwater waterbirds such as rails, Least and American Bitterns and Pied-billed Grebes.	• GIS layer of key nesting areas in CT • Foundation for conservation management planning •
Location: Connecticut	**Target Species:** Clapper Rail, Common Moorhen, King Rail, Sora, Virginia Rail, Pied-billed Grebe, American Bittern, Least Bittern
Timeline: To be determined	**Lead Organization:** To be determined
Activity: Research	

Partner Organizations: Audubon Connecticut, Connecticut Audubon Society, USFWS, CT DEP, Connecticut Ornithological Association

Costs: To be determined

Current Support:

Unfunded: All

Potential Sources: To be determined

36	**Program/Project Name:** Determination of Limiting Factors for Beach Nesting Waterbirds	**Submitted by:** Patrick Comins

Implementation Priority:

Rationale: Beach-nesting waterbirds are potentially limited by human disturbance in nesting areas, predation of eggs and young, loss of habitat through erosion and/or succession and loss or degradation of prey base or key foraging areas. Determination of the key factor or factors limiting populations of such species as Least Terns on Long Island Sound would allow for better population conservation management.

Objectives:	**Deliverables:**
• Determine limiting factors for beach-nesting waterbirds	• Identification of limiting factors at nest sites
Location: Long Island Sound, CT	**Target Species:** Least Tern, Common Tern, Roseate Tern, Double-crested Cormorant, Great Black-backed Gull, Herring Gull
Timeline: To be determined	**Lead Organization:** To be determined
Activity: Research	

Partner Organizations: Audubon Connecticut, Audubon New York, Connecticut Audubon Society, USFWS, CT DEP, Connecticut Ornithological Association

Costs: To be determined – need a ballpark figure

Current Support: None

Unfunded: All

Potential Sources: To be determined

37	**Program/Project Name:** Public Education and Outreach for Colonially-nesting Waterbirds	**Submitted by:** Patrick Comins EJ McAdams

Implementation Priority:

Rationale: Human disturbance at nesting colonies of both terns and herons is likely to increase with increasing recreational demand on coastal resources. Increased public awareness about these natural resources will result in improved public support for the conservation of these resources and may lead to behavior modification at sites. These birds are also easy to see for novices. By introducing participants to easy-to-see, celebrity species like egrets, herons and ibis, they may take a stronger interest in the conservation of these and other species. Any involvement in this project by Audubon Connecticut would likely be subsequent to completion of conservation plans, which will outline educational opportunities and needs at each location. USFWS (McKinney Wildlife Refuge) has begun work on a pamphlet about Island Ethics that would be related to this project.

Objectives:	**Deliverables:**
• Increase public awareness of the importance of nesting colonies for colonial waterbirds and the vulnerability of sites to disturbance • Produce and distribute educational materials about these sites outlining ways that the public can modify behavior so as to reduce disturbance at key locations • Develop site-based public education programs, where appropriate, to increase local awareness of the importance and fragility of these sites and foster increased local stakeholdership in the conservation of waterbird colonies • Develop a long-legged wading bird curriculum for the region (with sections specific to nesting colonies) for use on tours around the colony, preferably by boat (potentially modeled after Project Puffin)	• Educational materials (pamphlets, brochures, handouts) and programs • Increased local awareness and stewardship of nesting sites
Location: Key colonial waterbird nesting sites in BCR 30	**Target Species:** Colonial nesting waterbirds
Timeline: Long-term (to be determined)	**Lead Organization:** New York City Audubon Society, Audubon Connecticut, USFWS
Activity: Education	

Partner Organizations: Potential partners include: Connecticut DEP, Audubon New York, Connecticut Audubon Society, USFWS, educational institutions: Bank Street, NYU, Columbia Teacher's College

Costs: For NYC Audubon: boat rental is $900 for 2 hrs. Volunteers can lead the tours or an educator can be hired for $50/hour.

Current Support: NYC Audubon has a program in place to take participants up the East River to circle North and South Brother Islands. NYS DEC's Hudson River Estuary Grants Program provided funds for this pilot education program.

Unfunded: To be determined

Potential Sources: To be determined

38	**Program/Project Name:** Correlation Between Nesting Colonies of Colonial Wading Birds and Foraging Areas	**Submitted by:** Patrick Comins

Implementation Priority:

Rationale: Much is known about nesting areas of colonial herons and egrets, but little is known about foraging areas and how much of a limiting factor such areas are for these birds. Effective conservation planning for colonial waterbirds requires an understanding of the limiting factors both at nesting colonies and foraging areas around colonies. Additionally, a better understanding of key foraging areas will allow for greater protection of those areas and allow us to determine if additional potential or historical nesting areas are worthy of protection for their value as a potential rookery. Some work has been done with flight trajectories at Chimon Island and at Great Captains Island. Existing data could be analyzed along with GIS-based habitat modeling to determine where these birds are traveling to and from to gather food for nestlings. Inventory work and prey base analysis at known key foraging areas and trajectory analysis at additional colonies would add to our knowledge base about the importance of foraging areas.

Objectives:	**Deliverables:**
• Determine key foraging areas of each colony of colonial nesting waterbirds; • Analyze existing data along with GIS-based habitat modeling to determine where birds are traveling to and from to gather food for nestlings; • Analyze prey base at known key foraging areas and flight trajectories at additional colonies.	• Identification of critical foraging habitats sustaining waterbirds
Location: Long Island Sound	**Target Species:** Green Heron, Little Blue Heron, Yellow-crowned Night Heron, Black-crowned Night Heron, Cattle Egret, Snowy Egret, Great Egret
Timeline: To be determined	**Lead Organization:** To be determined
Activity: Research	

Partner Organizations: Audubon Connecticut, Audubon New York, New York City Audubon, Connecticut Audubon Society, USFWS, CT DEP, Connecticut Ornithological Association

Costs: To be determined

Current Support:

Unfunded: To be determined

Potential Sources: To be determined

39	**Program/Project Name:** Seasonal Waterbird Usage Inventory of Long Island Sound	**Submitted by:** Patrick Comins

Implementation Priority:

Rationale: There is little data on the importance of Long Island Sound to birds in the non-breeding season. Significant numbers of species such as Red-throated Loon, Northern Gannet, Horned Grebe and others may use the waters of Long Island Sound in migration or the winter. Better information about seasonal usage of the Sound by such birds would allow us to more effectively plan for and address potential threats to the Sound, such as pipeline crossings, dredging and dredge spoil disposal projects and oil spills. Data would also allow us to determine if the Sound may qualify as a nationally or continentally significant IBA.

Objectives:	**Deliverables:**
• Determine seasonal patterns of waterbird usage of Long Island Sound.	• Identification of temporal patterns of waterbird use in the Long Island Sound
Location: Long Island Sound	**Target Species:** Non-breeding waterbirds in LI Sound: Black-headed Gull, Black Kittiwake, Bonaparte's Gull, Common Loon, Double-crested Cormorant, Glaucous Gull, Great Black-backed Gull, Great Cormorant, Greater Shearwater, Herring Gull, Horned Grebe, Iceland Gull, Leach's Storm Petrel, Northern Gannett, Razorbill, Ring-necked Grebe, Red-throated Loon
Timeline: Dependent upon funding	**Lead Organization:** Connecticut DEP and University of CT
Activity: Research and Monitoring	

Partner Organizations: Audubon Connecticut, Audubon New York, Connecticut Audubon Society, US Coast Guard Auxiliary

Costs: To be determined

Current Support: Could be combined or at least coordinated with Connecticut DEP waterfowl inventory efforts.

Unfunded: DEP has at least some funding for plane-based waterfowl surveys

Potential Sources: To be determined

<table>
<tr><td>40</td><td>Program/Project Name: Coastal Waterbird Habitat Acquisition</td><td>Submitted by:
EJ McAdams</td></tr>
<tr><td colspan="3">Implementation Priority:</td></tr>
<tr><td colspan="3">Rationale: The NY-NJ Harbor Estuary Program has developed a list of High Priority and Priority Acquisition sites for the bi-state region. This project would seek funds for the acquisition of these lands, which are highly sought after by developers.</td></tr>
<tr><td colspan="2">Objectives:

• Prioritize the HEP sites with respect to waterbirds

• Identify potential acquisition funding sources and facilitate acquisition</td><td>Deliverables:

• Prioritized list of sites

• Permanently protected key sites within the estuary</td></tr>
<tr><td colspan="2">Location: Coastal sites in the New York/New Jersey Estuary</td><td>Target Species: Black-crowned Night-Heron, Yellow-crowned Night-Heron, Snowy Egret, Great Egret, Cattle Egret, Little Blue Heron, Glossy Ibis, Tri-colored Heron, Herring Gull, Great Black-backed Gull, Laughing Gull, Least Tern, Common Tern, roseate Tern, Gull-billed Tern, Foster’s Tern</td></tr>
<tr><td colspan="2">Timeline: 6 months for list; long-term for acquisition</td><td rowspan="2">Lead Organization: New York City Audubon</td></tr>
<tr><td colspan="2">Activity: Acquisition</td></tr>
<tr><td colspan="3">Partner Organizations: NY-NJ HEP, Trust for Public Land</td></tr>
<tr><td colspan="3">Costs: To be determined</td></tr>
<tr><td colspan="3">Current Support: To be determined</td></tr>
<tr><td colspan="3">Unfunded:</td></tr>
<tr><td colspan="3">Potential Sources: Port Authority</td></tr>
</table>

41	**Program/Project Name:** Harbor Heron Health & Monitoring Program	**Submitted by:** EJ McAdams

Implementation Priority:

Rationale: This multifaceted project involves collection health, disease, and toxicology information for wading birds nesting in NY Harbor, as well as volunteer data collection of information about the foraging ecology of these birds via observations of birds leaving their breeding grounds to forage, and using radio-telemetry. Harbor heron species are excellent sentinels of ecological health of the NY Harbor and surrounding waterways. These birds forage on fish species also eaten by humans in the NY area, and heron species utilize habitats, coast lines, and beaches often used by humans for recreational purposes and swimming. From this perspective, herons serve as great ecological indicators of contaminants such as heavy metals, pesticides, and PCB's. Previous research by Parsons et al. have demonstrated historical problems associated with contaminants and we will build on these studies to also evaluate baseline health of chicks and disease prevalence (West Nile Virus, Newcastle's, Avian Influenza, etc.) amongst heron colonies. This information will help resource managers understand the most important risks to heron health in the NY Harbor, and also provide managers with important information about the habitats that need to be preserved to ensure that herons have adequate nesting and foraging areas.

Objectives:	**Deliverables:**
• Measure baseline health indices and disease prevalence in herons • Measure pollutant levels from birds and prey • Radio-mark herons and monitor their foraging ecology • Train citizen scientists to help with foraging monitoring	• Report summarizing monitoring results • NY Harbor Herons Book • Field guide to NY Harbor Herons • Well-trained volunteers ready for future projects
Location: New York Harbor, foraging sites in NY & NJ	**Target Species:** Black-crowned Night-Heron, Cattle Egret, Glossy Ibis, Great Egret, Little Blue Heron, Snowy Egret, Tri-colored Heron, Yellow-crowned Night-Heron
Timeline: Initiated spring 2004; long-term	**Lead Organization:** New York City Audubon and Wildlife Trust
Activity: Monitoring and Research	

Partner Organizations: City of New York Parks and Recreation, NYS Dept. of Environmental Conservation, National Parks Service, College of Staten Island, Columbia University

Costs: $250,000 total project cost per year

Current Support: Spring -Summer 2004: $14,000 NYC Environmental Fund, $12,000 Hudson River Estuary Grants Program, Wildlife Trust $25,000

Unfunded: $199,000

Potential Sources: State Wildlife Grant

42	**Program/Project Name:** Metapopulation Studies	**Submitted by:** EJ McAdams

Implementation Priority:

Rationale: New York, Connecticut and other states/municipalities are currently monitoring how herons and terns move in each region, but there have not been any attempts to determine how they move between colonies. The numbers appear to be declining for these birds, and there is a need to quantify natural fluctuations and establish a baseline for unnatural fluctuations within and among populations.

Objectives:	**Deliverables:**
• Determine how birds move in the region and quantify natural fluctuations for use as a baseline for unnatural fluctuations • Gain a better sense of population declines • Identify islands which are sinks and sources • Tag or radio-telemetry birds • Build a group of birders to spot tagged birds, which will serve as the basis for future Waterbird Conservation Projects	• Better managed areas • Tagged bird observer network
Location: New Jersey, New York, Connecticut, Rhode Island, Massachusetts (Southern New England – Long Island Sound)	**Target Species:** Little Blue Heron, Black-crowned Night-Heron, Yellow-crowned Night-heron, Cattle Egret, Snowy Egret, Great Egret, Glossy Ibis, Common Tern, Least Tern, Roseate Tern
Timeline: To be determined	**Lead Organization:** Manomet Center for Conservation Sciences
Activity: Research and Monitoring	

Partner Organizations: New Jersey Audubon, NYC Audubon, Audubon CT, Audubon Rhode Island, Mass Audubon, state agencies, Wildlife Trust, NYC Parks

Costs: Approximately $50,000 for the volunteer portion, including a coordinator, travel, printing and mailing.

Current Support: NYC Audubon is working on projects in NY, Audubon CT in Connecticut, and others in their states/municipalities.

Unfunded: All

Potential Sources: State Wildlife Grants

<table>
<tr><td>43</td><td>Program/Project Name: Pelagic Seabird Research Initiative</td><td>Submitted by:
EJ McAdams</td></tr>
<tr><td colspan="3">Implementation Priority:</td></tr>
<tr><td colspan="3">Rationale: Very little is known about pelagic seabirds, and few have contact with them other than the most serious birders. Connecting the public to these birds will encourage the building of a constituency for their protection. Educating and enlisting fishing boats will allow fisherman to observe and report any drastic changes in pelagic seabird population.</td></tr>
<tr><td colspan="2">Objectives:

• Raise awareness on the status and concerns of pelagic seabirds using the web, press, and some kind of webcam.

• Create a booklet that describes threats to the birds and possible actions that citizens can take to mitigate threats

• Build a coalition of fishing boats and birders to count pelagic seabirds

• Develop methodology for pelagic bird research, as well as a way to ensure quality control</td><td>Deliverables:

• Booklet of pelagic seabird threats

• Network of fishing boats and citizen scientists for pelagic seabird counts

• Pelagic seabird research methodology</td></tr>
<tr><td colspan="2">Location: Hudson Canyon (off-shore of New York and New Jersey)</td><td>Target Species: Black-legged Kittiwake, Sooty Shearwater, Audubon’s Shearwater, Greater Shearwater, Manx Shearwater, Leach’s Storm-Petrel, Wilson’s Storm-Petrel, South Polar Skua, Long-tailed Jaeger, Northern Fulmar</td></tr>
<tr><td colspan="2">Timeline: To be determined</td><td rowspan="2">Lead Organization: To be determined</td></tr>
<tr><td colspan="2">Activity: Education</td></tr>
<tr><td colspan="3">Partner Organizations: New York City Audubon, Audubon Chapters in Long Island, etc</td></tr>
<tr><td colspan="3">Costs: Birders would likely volunteer, and a volunteer could design a website. Cost would include a custom pelagic bird webcam and providing incentive to the fishing boats to conduct seabird counts.</td></tr>
<tr><td colspan="3">Current Support: None</td></tr>
<tr><td colspan="3">Unfunded: All</td></tr>
<tr><td colspan="3">Potential Sources: To be determined</td></tr>
</table>

44	**Program/Project Name:** Public Education and Outreach for Colonial Nesting Waterbirds at Grandview Beach, City of Hampton, VA	**Submitted by:** Ruth Boettcher

Implementation Priority:

Rationale: Grandview Beach Nature Preserve (GBNP), owned by the City of Hampton, is the site of the largest and most well established least tern colonies on the western shore of the lower Chesapeake Bay. GBNP is currently accessible only by boat. However, because of its close proximity to a major metropolitan area, the colony is subject to considerable degree of human disturbance from recreational boaters, which has had a negative effect on colony's reproductive success over the years. The level of human disturbance is predicted to increase with increasing recreational demand on coastal resources. Therefore, it is critical to increase public awareness about the importance and sensitivity of this site in order to garner public support for its long-term conservation and protection. Moreover, effective public outreach and education may lead to human behavior modification, which will go a long towards reducing human disturbance. Ruth Beck, with the College of William and Mary, has done a considerable amount of outreach work on a very limited budget and has established a good working relationship with the City of Hampton's Recreation Dept. Annual funding is needed for the printing and delivery of educational materials, hiring of seasonal staff to be on hand during the breeding season to educate GBNP visitors on how they can minimize disturbance to the birds, and increase law enforcement presence to ensure compliance with area closures.

Objectives:	**Deliverables:**
• Produce and distribute educational materials about GBNP outlining ways that the public can modify behavior so as to reduce disturbance at the site. • Initiate site-based public outreach and education by having seasonal staff at BGNP on the weekends and holidays during the breeding season to educate visitors on the importance and fragility of GBNP and foster a local stakeholdership in the conservation of this important and historic breeding area. • Enhance the protection of least terns through improved signage and increased law enforcement presence.	• Educational materials (i.e. pamphlets, brochures, handouts) and programs • Improved and increased signage at GBNP. • Site-based public outreach and education by seasonal staff on weekends and holidays. • Increased law enforcement presence.
Location: Grandview Beach Nature Preserve, Hampton, VA	**Target Species:** Least Tern
Timeline: To be determined	**Lead Organization:** College of William and Mary and the Virginia Dept. of Game and Inland Fisheries
Activity: Education and Management	

Partner Organizations: Hampton Parks and Recreation Department

Costs: To be determined

Current Support: Virginia Dept. of Game and Inland Fisheries provides signage.

Unfunded: To be determined

Potential Sources: To be determined

45	**Program/Project Name:** Statewide Colonial Waterbird Surveys in Virginia	**Submitted by:** Ruth Boettcher

Implementation Priority:

Rationale: For the years prior to the mid-1970's, systematic information on the abundance and distribution of colonial waterbirds in Virginia does not exist. During the 1975 and 1976 breeding seasons, the first systematic survey of wading bird colonies in coastal Virginia was completed in association with a broad-based survey covering the entire Atlantic Coast. In 1977, the first systematic survey of all colonial waterbird species was conducted in association with the "Maine to Virginia" project, which focused primarily on the coastal fringe and did not attempt to cover the entire coastal plain. Between the mid-1970's and the early 1990's, colonial waterbird work in Virginia either examined assemblages within specific locations or targeted individual species over broad areas. During the spring and summer of 1993, the Center for Conservation Biology (College of William and Mary) in cooperation with the Virginia Department of Game & Inland Fisheries, the U.S. Fish & Wildlife Service, the Virginia Department of Environmental Quality, The Nature Conservancy, and many private volunteers coordinated a comprehensive survey of all colonial waterbirds within the Coastal Plain of Virginia. This effort resulted in the most detailed overview of colonial waterbirds ever achieved in the eastern portion of the state (Watts and Byrd 1998). Status and distribution information was collected for 24 species within 450 colonies and included an estimated 160,000 breeding adults. Colonies were scattered over 100 topographic quadrangles. The 1993 survey has been used extensively by all regulatory agencies within Virginia to help develop management plans and to make permit decisions. In 2003, this survey was repeated with the same level of effort and coverage. Because the status and distribution can change rapidly for some species particularly in the face of increasing development pressure, we wish to conduct a coastal plain breeding waterbird survey every 5 years vs. every 10 years to better track fluctuations in waterbird breeding population trends and to update distribution maps at a greater frequency. Moreover, we wish to publish the survey data in an electronic Waterbird Breeding Atlas beginning with the 2003 survey and provide updates upon the completion of each subsequent survey.

Objectives:	**Deliverables:**
• To conduct a complete colonial waterbird survey every 5 years to generate breeding population estimates for all colonial waterbird species nesting on the Coastal Plain of Virginia. • Produce map coverages for all waterbird colonies within the Coastal Plain for each survey completed. • Develop and publish an electronic colonial waterbird breeding atlas based on the 2003 colonial waterbird survey and update it with each subsequent survey conducted.	• Colonial waterbird survey every 5 years. • For each survey completed, digitized maps of all colony locations will de generated with a linked data file containing values of all completed survey form variables to allow users to search both the database and the map product using any variable of interest. • Electronic colonial waterbird breeding atlas based on the 2003 colonial waterbird survey to be updated with each subsequent survey conducted.
Location: Coastal plain of Virginia	**Target Species:** Black Skimmer, Brown Pelican, Caspian Tern, Common Tern, Double-crested Cormorant, Foster's Tern, Great Black-backed Gull, Gull-billed Tern, Herring Gull, Laughing Gull, Least Tern, Royal Tern, Sandwich Tern, Black-crowned Night-Heron, Cattle Egret, Glossy Ibis, Great Egret, Green Heron, Great Blue Heron, Little Blue Heron, Snowy Egret, Tri-colored Heron, White Ibis, Yellow-crowned Night-Heron
Timeline: Initiate 2008 breeding season; to be conducted every 5 years.	**Lead Organization:** VA Dept. of Game and Inland Fisheries (VDGIF) and the Center for Conservation Biology at the College of William and Mary
Activity: Monitoring and Research	

Partner Organizations: USFWS, TNC - Virginia Coast Reserve, and the Coastal Program at the VA Dept. of Environmental Quality.

Estimated Costs: To be determined.

Current Support: The 2003 Waterbird survey was completed with funding provided by partner organizations and VDGIF. Estimated project cost: $32,000.00

Unfunded: Colonial Waterbird Breeding Atlas and subsequent surveys

Potential Sources: State Wildlife Grants, others to be determined.

46	**Program/Project Name:** Urban Waterbird Management Plan for Virginia's Coastal Plain	**Submitted by:** Ruth Boettcher

Implementation Priority:

Rationale: As development continues to increase in Virginia Beach, along the western shore of the lower Chesapeake Bay, and within the major river systems that drain into the lower Bay (hereafter collectively referred to as the Tidewater Area), so has the occurrence of wading birds colonies (primarily yellow-crowned night herons and great egrets) in urban areas. Colonies located in urban areas are likely subjected to a greater degree of human disturbance (e.g., vehicular traffic, pets, physical structures that may obstruct flight paths to and from feeding areas, artificial lighting, loud urban noise) than colonies located in natural undisturbed areas and as such may experience reduced productivity. Additionally, the presence and foul odor of wading bird guano and dropped prey items in people's backyards has raised concerns over such issues as health and quality of life among community leaders and homeowners in the Tidewater Area. There is a need to develop an urban waterbird management plan that provides community planning departments with guidance on setting aside or restoring undisturbed natural areas to accommodate wading birds breeding colonies that have been displaced by development. Moreover, an urban management plan should include safe and humane actions to be taken to discourage wading birds from establishing colonies in residential communities *before* the egg laying period. And lastly, an effective plan should include a public outreach and education component that serves to increase public awareness on the ecology, conservation and protection of wading birds and offer communities guidance on how they can help enhance wading bird populations in ways that minimize direct conflicts between birds and humans.

Objectives:	**Deliverables:**
• To develop an urban management plan that effectively addresses increasing conflicts between colonial nesting wading birds and humans in urban areas.	• Urban management for the Tidewater Area of Virginia, which provides guidance to community planning departments on setting aside or restoring undisturbed natural areas for wading birds, offers safe and humane actions to be taken to discourage wading birds from establishing colonies in residential communities *before* the egg laying period, and contains information on the ecology, conservation and protection of wading birds to increase public awareness on the importance of these species
Location: Virginia Beach, Hampton, Williamsburg, Chesapeake, Suffolk, Norfolk, Newport News, Portsmouth and the surrounding area collectively referred to as the Tidewater Area.	**Target Species:** Yellow-crowned Night-Heron, Great Egret, Great Blue Heron
Timeline: To be determined	**Lead Organization:** VA Dept. of Game and Inland Fisheries and USDA Wildlife Services
Activity: Management	

Partner Organizations: Communities of the Tidewater Area, College of William and Mary, and The Nature Conservancy

Costs: To be determined

Current Support: None

Unfunded: To be determined

Potential Sources: State Wildlife Grants, others to be determined.

47	**Program/Project Name:** Developing a Comprehensive Waterbird Monitoring Plan for the Chesapeake Bay Estuary	**Submitted by:** Ruth Boettcher

Implementation Priority:

Rationale: The Chesapeake Bay, which spans across Maryland and Virginia is the largest estuary in the United States and supports a vast array of waterbirds. This area of the Bay's watershed is projected to increase its human population by 20% to 12 million by the year 2020. Because waterbirds are considered useful indicators of environmental quality, conservation efforts directed towards these species can help protect the areas in which they occur. Many waterbird species that utilize the Chesapeake Bay estuary are thought to be declining while the status of others is unknown due to a lack of monitoring effort. Most survey work has focused on breeding birds and little effort has been directed towards ascertaining the distribution and abundance of non-breeding birds in the Bay. Finally, no attempt has been made to assess the level of waterbird mortality in the Bay that may be associated with agricultural run-off, incidental capture in fishing gear, or natural causes.

Objectives:

Coordinate and develop a long-term waterbird monitoring plan for the Chesapeake Bay that will:

- Forge a permanent partnership between MD and VA to ensure coverage of the entire estuary
- Consider all breeding and non-breeding species that utilize the Bay
- Identify species' habitat requirements throughout the annual cycle
- Develop a methodology for assessing waterbird mortality
- Ensure that breeding, non-breeding and mortality surveys are conducted with sufficient frequency to generate statistically valid trends and population estimates

Deliverables:

- The compilation of existing waterbird data and the identification of data gaps
- The development of individual monitoring plans for species that are determined to have priority status
- A division of the watershed into practical units and corresponding monitoring responsibilities
- A published Comprehensive Chesapeake Bay waterbird monitoring plan that can be easily understood by researchers, wildlife managers, and laymen

Location: The Chesapeake Bay estuary, VA & MD

Target Species: waterbirds, waterfowl, shorebirds, etc. (species that are dependent on the Chesapeake bay estuary to complete their life cycle)

Timeline:

Lead Organization:

Activity: Monitoring and Research

Partner Organizations: The Comprehensive Chesapeake Bay Waterbird Monitoring Partnership (Maryland and Virginia-based government agencies, conservation organizations, and universities)

Costs: $125,000

Current Support: $125,000 ($93,750 Federal, 31,250 non-federal match)

Unfunded:

Potential Sources:

<table>
<tr><td>48</td><td>Program/Project Name: Increase Agency Capacity</td><td>Submitted by:
Steering Committee
(SWG list)</td></tr>
<tr><td colspan="3">Implementation Priority:</td></tr>
<tr><td colspan="3">Rationale:</td></tr>
<tr><td colspan="2">Objectives:

• Ensure involvement of appropriate state staff person for specified issues (fisheries, wind power, increading aquaculture, beach renourishment, sand-mining, development, recreational conflicts, erosion control, water supply planning, spill response) and in construction, avoidance measures, evaluating permits, and enforcing regulations on aquaculture industry</td><td>Deliverables:

• Inclusion of waterbird conservation goals, as feasible, in state projects</td></tr>
<tr><td colspan="2">Location: Mid-Atlantic/Lower BCR 30</td><td>Target Species: waterbirds</td></tr>
<tr><td colspan="2">Timeline:</td><td rowspan="2">Lead Organization:</td></tr>
<tr><td colspan="2">Activity: Management</td></tr>
<tr><td colspan="3">Partner Organizations:</td></tr>
<tr><td colspan="3">Costs:</td></tr>
<tr><td colspan="3">Current Support:</td></tr>
<tr><td colspan="3">Unfunded:</td></tr>
<tr><td colspan="3">Potential Sources: State Wildlife Grant</td></tr>
</table>

<table>
<tr><td>49</td><td>Program/Project Name: Aquaculture Impact Assessment</td><td>Submitted by:
Steering Committee
(SWG list)</td></tr>
<tr><td colspan="3">Implementation Priority:</td></tr>
<tr><td colspan="3">Rationale:</td></tr>
<tr><td colspan="2">Objectives:

• Conduct immediate analysis of current threats from ongoing aquaculture projects where significant activity is underway

• Predict probable impacts of proposed aquaculture development</td><td>Deliverables:

• Best Management Practices for aquaculture that minimizes impacts to waterbirds

• Involvement of a wildlife biologist from each state with aquaculture regulatory projects</td></tr>
<tr><td colspan="2">Location: All states (Mid-Atlantic/Lower BCR 30)</td><td>Target Species: waterbirds</td></tr>
<tr><td colspan="2">Timeline:</td><td rowspan="2">Lead Organization:</td></tr>
<tr><td colspan="2">Activity: Research and Management</td></tr>
<tr><td colspan="3">Partner Organizations:</td></tr>
<tr><td colspan="3">Costs:</td></tr>
<tr><td colspan="3">Current Support:</td></tr>
<tr><td colspan="3">Unfunded:</td></tr>
<tr><td colspan="3">Potential Sources: State Wildlife Grant</td></tr>
</table>

<table>
<tr><td>50</td><td>Program/Project Name: Atlantic-Wide Breeding Survey</td><td>Submitted by:
Steering Committee</td></tr>
<tr><td colspan="3">Implementation Priority:</td></tr>
<tr><td colspan="3">Rationale:</td></tr>
<tr><td colspan="2">Objectives:

• Continue 10-year Atlantic-wide breeding survey</td><td>Deliverables:</td></tr>
<tr><td colspan="2">Location: Mid-Atlantic/Lower BCR 30</td><td>Target Species:</td></tr>
<tr><td colspan="2">Timeline: Ongoing</td><td rowspan="2">Lead Organization:</td></tr>
<tr><td colspan="2">Activity: Monitoring</td></tr>
<tr><td colspan="3">Partner Organizations:</td></tr>
<tr><td colspan="3">Costs:</td></tr>
<tr><td colspan="3">Current Support:</td></tr>
<tr><td colspan="3">Unfunded:</td></tr>
<tr><td colspan="3">Potential Sources: State Wildlife Grant</td></tr>
</table>

<table>
<tr><td>51</td><td>Program/Project Name: Best Management Practices Manual</td><td>Submitted by:
Steering Committee
(SWG list)</td></tr>
<tr><td colspan="3">Implementation Priority:</td></tr>
<tr><td colspan="3">Rationale:</td></tr>
<tr><td colspan="2">Objectives:

• Prepare manual (e.g. Managers' Toolbox on Aquaculture, Disturbance, etc.), for use in federal and state refuges and management areas</td><td>Deliverables:

• Best Management Practices Manual</td></tr>
<tr><td colspan="2">Location: Mid-Atlantic/Lower BCR 30</td><td>Target Species:</td></tr>
<tr><td colspan="2">Timeline:</td><td rowspan="2">Lead Organization:</td></tr>
<tr><td colspan="2">Activity: Management</td></tr>
<tr><td colspan="3">Partner Organizations:</td></tr>
<tr><td colspan="3">Costs:</td></tr>
<tr><td colspan="3">Current Support:</td></tr>
<tr><td colspan="3">Unfunded:</td></tr>
<tr><td colspan="3">Potential Sources: State Wildlife Grant</td></tr>
</table>

<table>
<tr><td>52</td><td>Program/Project Name: Contaminants Loads and Effects</td><td>Submitted by:
Steering Committee (SWG list)</td></tr>
<tr><td colspan="3">Implementation Priority:</td></tr>
<tr><td colspan="3">Rationale:</td></tr>
<tr><td colspan="2">Objectives:

• Monitor contaminant loads and effects in waterbirds

• Maintain long-term data and tissue repositories

• Avoid/reverse habitat changes due to water quality alterations in important waterbird habitat

• Eliminate toxic discharges (implement EPA's Chesapeake Bay program recommendations)</td><td>Deliverables:</td></tr>
<tr><td colspan="2">Location: Mid-Atlantic/Lower BCR 30</td><td>Target Species: All waterbirds</td></tr>
<tr><td colspan="2">Timeline:

Activity: Research and Management</td><td>Lead Organization:</td></tr>
<tr><td colspan="3">Partner Organizations:</td></tr>
<tr><td colspan="3">Costs:</td></tr>
<tr><td colspan="3">Current Support:</td></tr>
<tr><td colspan="3">Unfunded:</td></tr>
<tr><td colspan="3">Potential Sources: State Wildlife Grant</td></tr>
</table>

<table>
<tr><td>53</td><td>Program/Project Name: Disease Studies</td><td>Submitted by:
Steering Committee
(SWG list)</td></tr>
<tr><td colspan="3">Implementation Priority:</td></tr>
<tr><td colspan="3">Rationale:</td></tr>
<tr><td colspan="2">Objectives:

• Support existing studies, such as recently discovered algae-related problem; West Nile; increases in vulnerability from colonial nesting</td><td>Deliverables:</td></tr>
<tr><td colspan="2">Location: Mid-Atlantic/Lower BCR 30</td><td>Target Species:</td></tr>
<tr><td colspan="2">Timeline:</td><td rowspan="2">Lead Organization:</td></tr>
<tr><td colspan="2">Activity: Research</td></tr>
<tr><td colspan="3">Partner Organizations:</td></tr>
<tr><td colspan="3">Costs:</td></tr>
<tr><td colspan="3">Current Support:</td></tr>
<tr><td colspan="3">Unfunded:</td></tr>
<tr><td colspan="3">Potential Sources: State Wildlife Grant</td></tr>
</table>

54	**Program/Project Name:** Foraging/Food-Chain Dynamics	**Submitted by:** Steering Committee
Implementation Priority:		
Rationale:		
Objectives: • Understand dynamics and effect on colonial populations		**Deliverables:**
Location: Mid-Atlantic/Lower BCR 30		**Target Species:**
Timeline:		**Lead Organization:**
Activity: Research		
Partner Organizations:		
Costs:		
Current Support:		
Unfunded:		
Potential Sources: State Wildlife Grant		

55	**Program/Project Name:** GIS System	**Submitted by:** Steering Committee (SWG list)

Implementation Priority:

Rationale:

Objectives:	**Deliverables:**
• Create patch-based GIS system for evaluating priorities for waterbird habitats as part of a standardized regional approach • Expand past partner lands to all habitats on a region-wide basis (underway at WM) • Map suitable habitat by species • Determine ownership and (if targets exist) determine how much of a population target is met on partner lands	• GIS system that includes spatial/temporal availability analysis, and habitat classification by ownership
Location: All states (Mid-Atlantic/Lower BCR 30)	**Target Species:**
Timeline:	**Lead Organization:**
Activity: Management	

Partner Organizations:

Costs:

Current Support:

Unfunded:

Potential Sources: State Wildlife Grant

<table>
<tr><td>56</td><td>Program/Project Name: Local Planning</td><td>Submitted by:
Steering Committee (SWG list)</td></tr>
<tr><td colspan="3">Implementation Priority:</td></tr>
<tr><td colspan="3">Rationale:</td></tr>
<tr><td colspan="2">Objectives:

• Encourage local planning (e.g. rolling setbacks and other tools) to ensure important waterbird habitat (including nonbreeding) is not affected by sea level rise due to climate change

• Develop education/outreach programs

• Develop BMPs and insert waterbird goals into state erosion control programs</td><td>Deliverables:</td></tr>
<tr><td colspan="2">Location: Mid-Atlantic/Lower BCR 30</td><td>Target Species:</td></tr>
<tr><td colspan="2">Timeline:</td><td rowspan="2">Lead Organization:</td></tr>
<tr><td colspan="2">Activity: Research and Education</td></tr>
<tr><td colspan="3">Partner Organizations:</td></tr>
<tr><td colspan="3">Costs:</td></tr>
<tr><td colspan="3">Current Support:</td></tr>
<tr><td colspan="3">Unfunded:</td></tr>
<tr><td colspan="3">Potential Sources: State Wildlife Grant</td></tr>
</table>

57	**Program/Project Name:** Patuxent Monitoring Database	**Submitted by:** Steering Committee

Implementation Priority:

Rationale:

Objectives: • Organize and contribute existing data to Patuxent Monitoring Database, including threat data to analyze priorities • Expand existing regional monitoring database, compiling all state and federal surveys	**Deliverables:**
Location: Mid-Atlantic/Lower BCR 30	**Target Species:**
Timeline:	**Lead Organization:**
Activity: Research & Monitoring	

Partner Organizations:

Costs:

Current Support:

Unfunded:

Potential Sources: State Wildlife Grant

58	**Program/Project Name:** Evaluating the Impact of hunting on Rails	**Submitted by:** Steering Committee (SWG list)
Implementation Priority:		
Rationale:		
Objectives: • Monitor and evaluate hunting impact on rail populations • Research rail populations and harvest • Manage/restore wild rice habitat for rails		**Deliverables:** • Incorporation of science-based information into hunting regulations
Location: Mid-Atlantic/Lower BCR 30		**Target Species:** Black Rail, Clapper Rail, King Rail, Virginia Rail and other poorly understood waterbirds
Timeline:		**Lead Organization:**
Activity: Research and Management		
Partner Organizations:		
Costs:		
Current Support:		
Unfunded:		
Potential Sources: State Wildlife Grant		

59	**Program/Project Name:** Marshbird Monitoring Program	**Submitted by:** Steering Committee, Ruth Boettcher, Dave Brinker, Karen Bennett, David Jenkins
Implementation Priority:		
Rationale:		
Objectives: • Develop targeted monitoring program following standardized regional (or national) approach, and using remote acoustical techniques		**Deliverables:**
Location: Mid-Atlantic/Lower BCR 30		**Target Species:** Black Rail (especially), American Bittern, American Coot, Clapper Rail, Common Moorhen, King Rail, Least Bittern, Pied-Billed Grebe, Purple Gallinule, Virginia Rail
Timeline:		**Lead Organization:**
Activity: Monitoring		
Partner Organizations:		
Costs:		
Current Support:		
Unfunded:		
Potential Sources: State Wildlife Grant		

61	**Program/Project Name:** Filling Significant Baseline Data Gaps for Atlantic Red-throated Populations	**Submitted by:** Chris DeSorbo

Implementation Priority:

Rationale: Declines have been noted for several Red-throated Loon populations around the world. A 53% decline in Alaska, and a notable decline across the Red-throated loon's European breeding range has recently drawn increasing international attention to this species. Causes for declines are poorly understood for most intensively studied populations, while the status of many populations remain unknown due to a significant data gap. Red-throated Loon populations along the Atlantic U.S. and Canada are perhaps one of the most poorly studied populations of this species globally.

A variety of anthropogenic threats impact Red-throated Loon populations on both wintering and breeding areas. By-catch from Atlantic gill-net fisheries has resulted in substantial losses to birds wintering in the mid-Atlantic, Forsell (1999) found an estimated 2,387 birds (68% of which were Red-throated Loons) were killed in gill nets and 825 washed up on beaches. This total is close to some estimates of the entire Red-throated Loon population of Shetland. (600 pairs). Coastal oil spills present a significant risk to Atlantic wintering waterbird populations. Oil spills such as the recent spill in Buzzard's Bay, Massachussetts (2003) or the North Cape in Rhode Island (1996) could have substantial impacts on populations, many of which are not sufficiently linked with their northern breeding areas. Exposure of Red-throated Loon populations to Persistent Bioaccumulative Toxins such as mercury, PCBs and DDT is widely unknown and should be of concern for some populations, such as those feeding in the Gulf of the St. Lawrence River. Studies documenting Red-throated Loon migration patterns, morphometrics, genetics information, and contaminant exposure are widely lacking for Atlantic populations and limits the implementation of conservation and management plans. We propose to study Red-throated Loon populations on their wintering and breeding grounds, and during migration to continue developing much of the baseline information that is currently lacking for this species.

Objectives:	**Deliverables:**
• Establish fall & spring coastal Red-throated Loon migration monitoring station(s) and conduct counts • Capture, band (USFWS/color) sample (blood and feathers) and gather baseline morphometrics, genetics, and stable isotope data on Northeast Atlantic breeding and wintering Red-throated loon populations • Determine baseline exposure levels and risk of Red-throated Loons to environmental contaminants • Evaluate Red-throated Loon diet and trophic level using stable isotope analysis of blood and feathers • Utilize archived loon carcasses from recent oil spills and fishery-mortalities to gather morphometrics, molt, and genetic marker information on winter loon kills	• Baseline data on timing and abundance during migration for fall and spring migrants • Increase understanding of migratory connectivity using banding, morphometrics, genetic markers, and stable isotope analysis information that can establish baseline data for Atlantic populations and be used in oil spill/fishery mitigation efforts • Toxicological risk assessment of sampled Red-throated Loon populations • Baseline data on diet and trophic position
Location: Northeastern US coast, Chesapeake Bay area, and Atlantic Canada	**Target Species:** Red-throated Loon
Timeline: Initiated summer 2003; long-term	**Lead Organization:** BioDiversity Research Institute: www.briloon.org
Activity: Monitoring and Research	

Partner Organizations: US Fish and Wildlife Service, Canadian Wildlife Service, Maine Department of Inland Fisheries and Wildlife, Loon Preservation Committee, Cape May Bird Observatory (potential), Manomet Bird Observatory (potential), Buffalo State College

Costs: $175,000 - $200,000 over 3 yrs.

Current Support: $2500 grant received (North American Loon Fund) for pilot study conducted in 2003

Unfunded: total project cost currently unfunded

Potential Sources: NRDA oil spill fund, Sea Grant Pgm (national and state), state oil spill funds, USFWS

62	**Program/Project Name:** Gulf of Maine Seabird Contaminant Assessment Network (GOMSCAN)	**Submitted by:** Wing Goodale

Implementation Priority:

Rationale: GOMSCAN is a standardized, long-term investigation to determine acute and chronic changes in contaminant profiles. Overall emphasis is on PBTs with an initial, three-year focus on profiling the spatial and temporal distributions of mercury (Hg). This effort is strongly patterned after a successful program directed by the Canadian Wildlife Service (CWS) in the Maritimes and Labrador for the past 35 years and will be linked to other relevant programs. Mercury analysis is initially emphasized because (1) it is a leading regional, continental, and global environmental issue, (2) trends in some seabird species in eastern North America have significantly increased since the 1970s (even though atmospheric deposition trends in the U.S. are actually declining), and (3) analysis is relatively inexpensive and can be subsidized by BioDiversity Research Institute (BRI) and Texas A&M Trace Element Research Lab.

The sampling effort will focus on five species, placing a priority on Leach's storm-petrel. The storm-petrel is an offshore surface feeder (zooplankton, small-sized fish) and its mercury levels likely represent global atmospheric deposition trends that may be increasing. In fact, CWS studies have documented a significant increase in egg Hg levels over an approximately 30-year period in the Canadian Maritimes and average exposure levels are now in established hazard ranges for birds (i.e., >0.5 ppm, ww).

Objectives:

- Establish suitable target seabird species, study islands, and methodologies that can be used to determine long-term temporal and spatial trends of Hg in marine environments
- Opportunistically collect relevant tissues from non-target seabird species to assess Hg risk to breeding populations in the Gulf of Maine
- Compare differences in tissue Hg levels among three general areas: (a) major river outlets, (b) nearshore areas, and (c) offshore areas
- Archive tissues for future potential contaminant, genetic, and isotope analysis

Deliverables:

- Comparison of Hg levels (and other PBTs) with relevant programs
- Identification of potential riverine and/or cove point sources of Hg
- Ability to assess risk in a spatially-explicit way
- Ability to monitor Hg trends over time
- Ability to archive tissues for future assays

Location: Gulf of Maine

Target Species: Leach's Storm-Petrel, Double-crested Cormorant, Common Tern, Atlantic Puffin, Common Eider

Timeline: 2005 (complete pilot study), 2006 complete sampling effort (repeated every 5 years)

Activity: Research

Lead Organization: BioDiversity Research Institute www.briloon.org

Partner Organizations: National Audubon Society

Costs: 2005 ($25,000), 2006 ($30,000) for a total of $55,000

Current Support: None

Unfunded: $55,000

Potential Sources: To be determined

63	**Program/Project Name:** Loon Web Camera	**Submitted by:** Wing Goodale

Implementation Priority:

Rationale: BioDiversity Research Institute, began in 2002 the Loon Web cam. Using state of the art technology, BRI over the last two years has recorded and uploaded live to the internet nest construction, egg laying, incubation, egg hatching, and egg predation. The project has been a complete success logging up to 6000 page views per day from people on every continent with the exception of Antarctica. Not only has this remote controlled robotic infrared camera provided an extraordinary educational opportunity for adults and school groups, but it also has provided vital scientific data: year one we recorded the female incubating the eggs 95% at night and in year two we recorded egg predation by mink. As successful as this project has been, it has been limited in scope by only recording one pair of loons. We seek to expand this project by adding a second system to monitor another banded loon pair.

One of Maine's greatest natural resources is its lakes, with the common loon serving as both a symbol of the lakes and an indicator of the their health. For lakes to be protected, citizens need to be educated about threats to lakes and how they can mitigate them, and scientists need as much information as possible about lake ecology. Both of these important objectives are fulfilled with the loon Web cam.

By accessing the Web cam, Maine citizens will watch the intimate lives of the loons, personally connect with the birds, and read accompanying literature that explains loon threats. This personal connection will afford people a context to relate to and hopefully act in when wildlife becomes threatened. Loons face many threats, and potentially the loon Web cam will motivate citizens to act against them, by, for example, vigilantly checking their boats for milfoil as well as insisting on using non-lead sinkers (a loon that has ingested lead will die within a week).

In addition, BRI will record the entire nesting process, review those tapes, and assemble the data into a scientific paper. Each published scientific paper is vital to the understanding of loon natural history, which is critical as BRI quantifies the impacts of mercury, lake development and lead on these charismatic birds. The last summer's data, never before recorded with such accuracy, were analyzed and prepared for a scientific paper that will be submitted to *The Canadian Field Naturalist.* By integrating science and education, BRI is able to make significant steps forward in protecting the loons and the lakes on which they live.

Objectives:	**Deliverables:**
• Set up second loon web camera • Promote lake conservation and loon protection by personally connecting people to loons • Collect publishable scientific data on loon nesting behavior	• Web page with a live image of a nesting loon pair with supporting educational materials • Entire incubation recorded on time-lapse VCR, reviewed, summarized, and submitted to a peer reviewed journal
Location: Mid-coast Maine	**Target Species:** Common Loon
Timeline: 2005 – 2010. Equipment should function for at least 5 years	**Lead Organization:** BioDiversity Research Institute www.briloon.org
Activity: Education and Research	

Partner Organizations: VillageSoup, Maine Audubon

Costs: $35,000

Current Support: Currently exploring options

Unfunded: $35,000

Potential Sources: MBNA Foundation, Maine Community Foundation

64	**Program/Project Name:** Seabird Monitoring in the Mingan Archipelago National Park Reserve and the Forillon National Park of Canada	**Submitted by:** Quebec Waterbird Plan

Implementation Priority:

Rationale:

These monitoring programs are carried out by teams of technicians and biologists from Parks Canada in order to better understand the seabird trends within the parks' limits. The results from these surveys are recorded in the BIOMQ and consolidate our knowledge on seabirds of BCR 8 and 14.

Objectives: • Consolidation of the knowledge of seabirds in BCR 8 and 14	**Deliverables:** • The development and implementation of a seabird monitoring program in the Mingan Archipelago National Park Reserve and the Forillon National Park
Location: The Mingan Archipelago National Park Reserve and the Forillon National Park of Canada (BCRs 8 and 14)	**Target Species:** Colonial waterbirds
Timeline: Every three years, but varies per species	**Lead Organization:** Canadian Wildlife Service?
Activity: Monitoring	

Partner Organizations:

Costs:

Current Support:

Unfunded:

Potential Sources:

65	**Program/Project Name:** Seabird Monitoring in the St. Lawrence Estuary, the Gaspé Peninsula and the Magdalen Islands	**Submitted by:** Quebec Waterbird Plan

Implementation Priority:

Rationale:

These large geographic entities are part of BCR 14. The seabird colonies of BCR 14 have been surveyed according to a more or less regular time interval due to a lack of resources. We need to establish a 5-year survey interval for each of these geographic regions and survey seabird nesting in the most important colonies of this BCR (see the important sites of BCR 14 in section 2.0) (last partial survey, St. Lawrence Estuary: 2001, expected: 2006; last survey, Gaspé Peninsula: 2002, expected: 2008; last partial survey, Magdalen Islands: 2000; expected 2007).

Objectives:	**Deliverables:**
• Surveys of important colonies in BCR 14	• The establishment of a 5-year survey interval
Location: The St. Lawrence Estuary, the Gaspé Peninsula and the Magdalen Islands (BCR 14)	**Target Species:** Colonial waterbirds
Timeline: Five year intervals	**Lead Organization:** Canadian Wildlife Service?
Activity: Monitoring	

Partner Organizations:

Costs:

Current Support:

Unfunded:

Potential Sources:

66	**Program/Project Name:** Monitoring of the Northern Gannet Population in the Gulf of St. Lawrence	**Submitted by:** Quebec's Waterbird Plan

Implementation Priority:

Rationale:

This survey is part of CWS National Seabird Program established in 1971(Nettleship 1993; 1997) and recurs every 5 years. Since there are only 6 colonies across Canada, three of which are in Québec, all colonies are surveyed during the same season jointly by the Québec and Atlantic regions. This species is also used as an indicator species of the St. Lawrence marine ecosystem's health status in the monitoring phase of the SLAP-III. Data on productivity and contamination of the Northern Gannet of Bonaventure Island area also recorded. Until now, this monitoring program has respected the five year time span since 1967. The research division, on the other hand, would need to be supported by additional resources (last survey: 1999, expected: 2004).

Objectives:	**Deliverables:**
• Monitoring surveys for the Northern Gannett in the Gulf of St. Lawrence	• The continuation of 5-year survey intervals
Location: The Gulf of St. Lawrence (BCR 14)	**Target Species:** Northern Gannett
Timeline: Every 5 years – next survey in 2009	**Lead Organization:** Canadian Wildlife Service National Seabird Program
Activity: Monitoring	

Partner Organizations:

Costs:

Current Support:

Unfunded:

Potential Sources:

67	**Program/Project Name:** Population Monitoring of the Ring-billed Gull in BCR 13 and 14	**Submitted by:** Quebec Waterbird Plan

Implementation Priority:

Rationale:

This survey is carried out every three years within the framework of the monitoring of overabundant species. Due to the numerous complaints concerning the invasion of gulls in urban areas, CWS, Québec region, follows the evolution of Ring-billed Gull populations in BCRs 13 and 14 because of their close links to urban environments. This survey is very important to support and justify gull control when necessary.

Objectives:	**Deliverables:**
• A better understanding of Ring-billed Gull populations to support and justify gull control where necessary	• The completion of a Ring-billed Gull survey every three years
Location: BCRs 13 & 14	**Target Species:** Ring Billed Gull
Timeline: Next survey in 2006, three year intervals	**Lead Organization:** Canadian Wildlife Service – Quebec Region
Activity: Monitoring	

Partner Organizations:

Costs:$25,000 per year (Canadian)

Current Support:

Unfunded:

Potential Sources:

68	**Program/Project Name:** Population Monitoring of the Double-crested Cormorant in BCR 13 and 14	**Submitted by:** Quebec Waterbird Plan

Implementation Priority:

Rationale:

This species is protected under provincial government legislation. In the last couple of years, an increase in the North American Double-crested Cormorant population has raised questions among Lake Saint-Pierre commercial and sport fishermen concerning a possible competition for resources. An increase in the Double-crested Cormorant population in the St. Lawrence Estuary has also affected the nesting habitat of other colonial bird species which justified population control for this species in the late 80s and early 90s. To support and justify these controls, FAPAQ wants to maintain a survey for this species in BCR 13 and 14.

Objectives:	**Deliverables:**
• A better understanding of Double-crested Cormorant populations to support and justify control where necessary	• Double-crested Cormorant Surveys
Location: BCR 13 and 14	**Target Species:** Double-crested Cormorant
Timeline:	**Lead Organization:** Quebec Ministère des Ressources naturelles, de la Faune et des Parcs (FAPAQ)
Activity: Monitoring	

Partner Organizations:

Costs: $25,000 per year (Canadian)

Current Support:

Unfunded:

Potential Sources:

69	**Program/Project Name:** Monitoring of Non-colonial Waterbirds in Quebec	**Submitted by:** Quebec Waterbird Plan

Implementation Priority:

Rationale:

There are currently few monitoring programs covering waterbird species other than seabirds. As opposed to seabirds, which usually nest in colonies, several waterbird species are found in isolated pairs. Very low densities require survey techniques which are adapted to scattered distributions. We must therefore plan on several years of development and practice to implement monitoring systems for these species. Even if certain monitoring programs already exist for particular species, resources to maintain them and improve their contents are deficient.

Objectives: • The improvement of non-colonial waterbird monitoring systems already in place	**Deliverables:** • The development and implementation of new monitoring systems for non-colonial waterbirds
Location: Quebec	**Target Species:** Non-colonial waterbirds
Timeline:	**Lead Organization:** Canadian Wildlife Service
Activity: Monitoring	

Partner Organizations:

Costs:

Current Support:

Unfunded:

Potential Sources:

70	**Program/Project Name:** Monitoring Great Blue Heron Colonies in Quebec	**Submitted by:** Quebec Waterbird Plan

Implementation Priority:

Rationale:

In connection with the Conservation Law of the Québec government and its regulation on wildlife habitats, FAPAQ conducts surveys for all heron colonies on the entire Québec territory every five years. This survey is also a monitoring element within the framework of SLAP (Monitoring program of SLAP-III) and is carried out jointly with contaminant monitoring directed by the Canadian Wildlife Service.

Objectives: • Surveys for all Great Blue Heron colonies in Quebec • Contaminant monitoring	**Deliverables:** • The continuation of Great Blue Heron surveys every five years
Location: BCR 12, 13 & 14	**Target Species:** Great Blue Heron
Timeline: Every five years	**Lead Organization:** FAPAQ, Canadian Wildlife Service
Activity: Monitoring	

Partner Organizations:

Costs:

Current Support:

Unfunded:

Potential Sources:

71	**Program/Project Name:** Canadian Lake Loon Survey	**Submitted by:** Quebec Waterbird Plan

Implementation Priority:

Rationale:

The Canadian Lake Loon Survey is supervised by Bird Studies Canada. The Québec province is only partially covered in time and space due to the absence of a regional coordinator for Bird Studies Canada. This monitoring program is carried out by volunteers who send their observations to Bird Studies Canada. The authorities of La Mauricie National Park of Canada also have a monitoring program on the Common Loon which began in 1987.

Objectives:

- An ongoing survey of Common Loons on Canadian Lakes

Deliverables:

Location: Canada

Target Species: Common Loon

Timeline:

Activity: Monitoring

Lead Organization:
Bird Studies Canada

Partner Organizations:
La Mauricie National Park of Canada

Costs:

Current Support:

Unfunded:

Potential Sources:

72	**Program/Project Name:** Marsh Monitoring Program Expansion to Quebec	**Submitted by:** Quebec Waterbird Plan, BCR 14 Bird Plan, Contact: Karl Levesque

Implementation Priority:

Rationale:

In the Great Lakes region, the bi-national Marsh Monitoring Program (MMP) (www.bsc-eoc.org/mmpmain.html) aims to survey bird species of Canadian and American wetlands. It would be appropriate to link a future survey program on waterbirds associated with Québec wetlands with the MMP via a Bird Studies Canada coordinator. The sites to be surveyed could consist of the existing National Wildlife Reserves in BCR 13 and 14 as well as certain provincial and federal parks in the BCRs situated farther north. Exceptional environments should also be surveyed, such as Rupert Bay for example, where we find an important population of Yellow Rail which is a species at risk.

Objectives:	**Deliverables:**
• Continue marsh surveys in the Great Lakes Region • Link the Quebec MMP to the MMP already in place in the Great Lakes Region	• The development and implementation of a wetland bird monitoring program for Quebec which is linked to the MMP in the great lakes region
Location: The Great Lakes region with expansion to parts of Quebec: National Wildlife Reserves in BCR 13 and 14 as well as certain provincial and federal parks in the BCRs situated farther north, exceptional environments such as Rupert Bay	**Target Species:** Marshbirds and wadingbirds (esp. Yellow Rail)
Timeline: In progress	**Lead Organization:** Bird Studies Canada, Canadian Wildlife Service
Activity: Monitoring	

Partner Organizations: U.S. Great Lakes Protection Fund, the U.S. Environmental Protection Agency, the Great Lakes 2000 Cleanup Fund

Costs:

Current Support:

Unfunded:

Potential Sources: U.S. Great Lakes Protection Fund, the U.S. Environmental Protection Agency, the Great Lakes 2000 Cleanup Fund

73	**Program/Project Name:** Recovery of Tern colonies of the Gulf of St. Lawrence	**Submitted by:** Quebec Waterbird Plan, BCR14 Plan, Contact: Jean-Francois Rail

Implementation Priority:

Rationale:

The Common Tern populations of the Gaspé region have declined considerably over the past ten years. Gull control techniques are being experimented to restore the Common Tern colony of Sandy Beach in the Gaspé region as well as in the Magdalen Islands, where Red Fox predation and gull invasion in areas favorable for the Common, Arctic and Roseate Tern (an endangered species) are factors which prevent their respective populations from increasing. Parallel to these measures taken to restore these populations, there should be long term research on tern reproductive success and survival rates. These studies would enable us to measure the effectiveness of the interactions carried out in the colonies

In BCR 14, we find several favorable habitats for the establishment of large tern colonies. In the Gaspé region, there is presently a project to restore the Common Tern at Sandy Beach (Gaspé Bay) which requires varied management techniques such as predator elimination either by trapping or electric fence installation (Red Fox) or the installation of enclosures made of monofilament treillis which prevents gulls from establishing in habitats favorable for tern nesting. There are other sites in the Gaspé region which should be managed to restore Common Tern colonies which were once thriving such as the Carleton Beach Ridge and the Saint-Omer MBS. At the Magdalen Islands, the colonies of Paquet Island, Îlot du Chenal, Baie du Portage Island (Havre-aux-Basques) and the 2nd islet of Point-aux-Loups should also be the object of management for tern colony recovery. Let us mention that three species nest at the Magdalen Islands: the Common Tern, the Artic Tern and the Roseate Tern, a species at risk. Colony locations in Prince Edward Island and New Brunswick must also be looked at.

Objectives: • Experimentation with predator control techniques for Red Fox and gulls • Long term research on tern reproductive success and survival rates	**Deliverables:** • Tern restoration at nesting sites facilitated by predator elimination
Location: The Gaspe Peninsula and the Magdalen Islands, Quebec. Also select locations in Prince Edward Island and New Brunswick	**Target Species:** Common Tern, Arctic Tern, Roseate Tern
Timeline: **Activity:** Research and management	**Lead Organization:** Canadian Wildlife Service?

Partner Organizations:

Costs: $20,000 per year (Canadian)

Current Support:

Unfunded:

Potential Sources:

74	**Program/Project Name:** Predator Control on Islands in Southeastern Canada	**Submitted by:** Quebec Waterbird Plan

Implementation Priority:

Rationale:

Predation by the Red Fox is a recurrent problem on islands of the St. Lawrence Estuary (BCR 14) like the Long Pèlerin, the Petit Pèlerin, the Gros Pèlerin, the Gros Pot and the Pot du Phare where the majority of Razorbills of the St. Lawrence Estuary are found. The Société Duvetvor Ltée has made efforts to eliminate them until now, but without substantial and sustained help, we cannot guarantee control efficiency.

On the North Shore (BCR 8), the predation problem is particularly important in the following three sanctuaries: Baie des Loups, Sainte-Marie Islands and Brador Bay. Efforts are currently under way to control the Red Fox at the Sainte-Marie Islands, which is not the case for the other two sanctuaries.

At Brion Island, a Provincial Ecological Reserve, Red Fox control would allow the recovery of the Leach's Storm-Petrel colony and would most certainly be favorable for the Atlantic Puffin.

Objectives:	**Deliverables:**
• Control of the red fox at important waterbird nesting sites • The reduction of predation by the red fox at important Razorbill nesting sites	• The recovery of a Leach's Storm-Petrel on Brion Island through Red Fox control
Location: The islands of the St. Lawrence Estuary, and in the sanctuaries of the North Shore and Brion Island (Magdalen Islands), Quebec	**Target Species:** Razorbill, Leach's Storm-Petrel, Atlantic Puffin
Timeline:	**Lead Organization:** Canadian Wildlife Service?
Activity: Management	

Partner Organizations:

Costs: $100,000 per year (Canadian)

Current Support:

Unfunded:

Potential Sources:

77	**Program/Project Name:** Black Duck Joint Venture	**Submitted by:** BCR 14 Plan Contacts: Daniel Brodage, Christine Lepage

Implementation Priority:

Rationale:

The urgency of rebuilding Black Duck populations led the NAWMP to set up the Black Duck Joint Venture (BDJV) (www.qc.ec.gc.ca/faune/sauvagine/html/bdjv.html). The status of the American Black Duck remains a source of concern since it continues to face heavy hunting pressure, habitat loss and degradation, and competition from the Mallard. Even though designed to optimize American Black Duck counts, this helicopter survey also provides breeding pair trends and population estimations for 20 other species breeding in Quebec. The BDJV mandate is to facilitate and co-ordinate the gathering of information to improve our knowledge of this and other species and guide conservation and management decisions. Three programs were established under the venture: a survey program, banding program and research program.

Objectives:	**Deliverables:**
• Annual helicopter breeding pair survey in boreal forest (8 plots in BCR 14 on the Gaspé peninsula) • Ground breeding pair monitoring along the shore of the St. Lawrence	
Location: Quebec	**Target Species:** Waterfowl (20 species) and Common Loon
Timeline: Ongoing, annual	**Lead Organization:** Canadian Wildlife Service
Activity: Research and Monitoring	

Partner Organizations:

Costs:

Current Support:

Unfunded:

Potential Sources:

78	**Program/Project Name:** Species At Risk Program for Canada	**Submitted by:** BCR 14 Plan Contacts: Michel Robert François Shaffer

Implementation Priority:

Rationale:

According to the Committee on the Status of Endangered Wildlife in Canada, there are currently 444 plant and animal species at risk in Canada. The Whooping Crane, the North Atlantic right whale, the monarch and the blue ash are just a few examples. Another 12 species are already extinct. The Species At Risk Program (www.speciesatrisk.gc.ca) seeks to monitor and research populations of species of risk throughout Canada and develop management plans for species recovery. Birds targeted in BCR 14 are highlighted here.

Objectives:	**Deliverables:**
• Monitoring of use of nesting sites by populations of bird species at risk in BCR 14 • The development of recovering plans for species at risk	In BCR 14: • Monitoring of the Horned Grebe population on the Magdalen Islands • Research on the Horned Grebe including genetic studies • Monitoring of Roseate Terns on the Magdalen Islands
Location: Canada	**Target Species:** Horned Grebe, Roseate Tern, Barrow Goldeneye, Harlequin Duck, Piping Plover
Timeline: Ongoing	**Lead Organization:** Canadian Wildlife Service, Association Quebecoise des Groupes D'Ornithologues (AQGO)
Activity: Research, management, monitoring	

Partner Organizations:

Costs:

Current Support: Endangered Species Recovery Fund, Interdepartmental Recovery Fund, Habitat Stewardship Program, Ecological Gifts, EcoAction

Unfunded:

Potential Sources:

79	**Program/Project Name:** Cape Breton Beached Bird Survey	**Submitted by:** BCR 14 Plan Contact: Becky Whittam

Implementation Priority:

Rationale:

Hundreds of ships pass through the waters off the Atlantic Canadian coast daily. This traffic creates a real problem for birds. In particular, the illegal dumping of oily bilge waste leads to chronic petroleum pollution. Oil pollution poses a great threat to pelagic seabirds, the bodies of which are separated from near zero-degree water by a natural "survival suit" of feathers.

Latest estimates from the Canadian Wildlife Service, who are partnering with Bird Studies Canada to launch the Cape Breton Survey (www.bsc-eoc.org/regional/acbeachbird.html), indicate that about 300,000 birds die each year as a result of chronic oil pollution. This is comparable to the impact of the Exxon Valdez spill each year!

Usually the first sign of impact from this oil is the appearance of dead and dying birds on beaches. By systematically monitoring birds on beaches - oiled and clean - we can detect fluctuations in both the amount of oil pollution occurring in the Atlantic, as well as its effect on waterbirds. This type of information is extremely important in helping to eliminate the problem.

Cape Breton is an area of extreme risk for birds oiled at sea, due to both the heavy shipping traffic through the Cabot Strait and the concentrations of marine birds that use this water in winter. Beached bird survey participants will be helping to develop a baseline index of oiled birds in Cape Breton. If large spills occur, this baseline can be used to estimate the impact of the spills on seabirds. Beached bird survey data can also be used to determine what species of seabirds are most affected by oiling, what time of year the problem is most severe, and whether the proportion of oiled birds washing up on beaches is changing over time.

A beached bird survey has been in place in southeastern Newfoundland since 1984. Results of this survey indicate that the proportion of beached birds that are oiled has been increasing steadily, at a rate of 3% per year, since the survey began. While this may be due in part to a decrease in clean dead birds (due to declining murre hunts and milder weather conditions in winter), there is still a relationship between ship traffic volume and the proportion of oiled birds. There is clearly a great need to expand the data collection and monitor beached birds along other parts of Canada's Atlantic coast.

Objectives:	**Deliverables:**
• Implement a beached bird survey on Cape Breton, NS	• Monthly beached bird surveys performed by volunteers on Cape Brenton, NS
Location: Cape Breton, NS	**Target Species:** Seabirds
Timeline: Monthly surveys	**Lead Organization:** Bird Studies Canada
Activity: Monitoring	

Partner Organizations: Canadian Wildlife Service

Costs:

Current Support:

Unfunded:

Potential Sources:

80	**Program/Project Name:** Isle au Haute Acquisition	**Submitted by:** BCR 14 Bird Plan Contacts: Brad Allen, Bruce Connery
Implementation Priority:		
Rationale:		
Objectives: • Acqusition in association with refuge • Easements • Harvest managements • Invertebrate management • Oil spill planning	**Deliverables:**	
Location: Isle au Haute, Maine	**Target Species:** Waterbirds, shorebirds, landbirds, waterfowl	
Timeline:	**Lead Organization:**	
Activity: Acquisition		
Partner Organizations:		
Costs:		
Current Support:		
Unfunded:		
Potential Sources: North American Wetlands Conservation Act Grants Program, State Wildlife Grants, land trusts, Pew trusts		

<table>
<tr><td>81</td><td>Program/Project Name: Kennebec/ Merrymeeting Bay(MMB) Acquisition</td><td>Submitted by:
BCR14 Bird Plan
Contact: Sandy Ritchie</td></tr>
<tr><td colspan="3">Implementation Priority:</td></tr>
<tr><td colspan="3">Rationale:</td></tr>
<tr><td colspan="2">Objectives:

• Acquisition/ easements
• Enforcing discharge permits
• Outreach</td><td>Deliverables:</td></tr>
<tr><td colspan="2">Location: Kennebec/MMB, Maine</td><td>Target Species: waterbirds, shorebirds, waterfowl</td></tr>
<tr><td colspan="2">Timeline:</td><td rowspan="2">Lead Organization:</td></tr>
<tr><td colspan="2">Activity: Acquisition, Education/Outreach</td></tr>
<tr><td colspan="3">Partner Organizations:</td></tr>
<tr><td colspan="3">Costs:</td></tr>
<tr><td colspan="3">Current Support:</td></tr>
<tr><td colspan="3">Unfunded:</td></tr>
<tr><td colspan="3">Potential Sources: North American Wetlands Conservation Act Grants Program, State Wildlife Grants, and land trusts</td></tr>
</table>

82	**Program/Project Name:** Cobscock Bay Acquisition	**Submitted by:** BCR14 Bird Plan, Contact: Tom Hodgman
Implementation Priority:		
Rationale:		
Objectives: • Acquisition and easements in this The Nature Conservancy focus area • Regulate discharge from aquaculture		**Deliverables:**
Location: Cobscock Bay, Maine		**Target Species:** Shorebird Waterfowl Waterbird
Timeline:		**Lead Organization:**
Activity: Acquisition		
Partner Organizations:		
Costs:		
Current Support:		
Unfunded:		
Potential Sources: The Nature Conservancy, North American Wetlands Conservation Act Grants Program, State Wildlife Grants		

<table>
<tr><td>83</td><td>Program/Project Name: St. Lawrence Estuary Acquisition</td><td>Submitted by:
BCR 14 Plan</td></tr>
<tr><td colspan="3">Implementation Priority:</td></tr>
<tr><td colspan="3">Rationale:</td></tr>
<tr><td colspan="2">Objectives:

• Acquisition to fill gaps in current protection (National Wildlife Areas)</td><td>Deliverables:</td></tr>
<tr><td colspan="2">Location: Ile Rouge, Batture aux Loups Marins, Cacouna (St. Lawrence Estuary, Canada)</td><td>Target Species: Razorbill, Black Guillemot, Black-legged Kittiwake, Virginia Rail, Sora, Black-crowned Night-Heron, waterfowl, shorebirds, landbirds</td></tr>
<tr><td colspan="2">Timeline:</td><td rowspan="2">Lead Organization: Canadian Wildlife Service – Quebec Region</td></tr>
<tr><td colspan="2">Activity: Acquisition</td></tr>
<tr><td colspan="3">Partner Organizations:</td></tr>
<tr><td colspan="3">Costs:</td></tr>
<tr><td colspan="3">Current Support:</td></tr>
<tr><td colspan="3">Unfunded:</td></tr>
<tr><td colspan="3">Potential Sources:</td></tr>
</table>

84	**Program/Project Name:** Marshbird, Tern and Shorebird Protection in South Shore Gaspe	**Submitted by:** BCR 14 Plan

Implementation Priority:

Rationale:

Waterbird protection is quite complete but protection for inland waterbirds, shorebird, terns.

Objectives: • Protection for inland waterbirds, shorebird, terns	**Deliverables:**
Location: Barachois de Malbaie, Douglastown, Chandler, Bonaventure, New Richmond, Pointe a la Croix (South Shore Gaspe, Quebec)	**Target Species:** Black Guillemot, Common Tern, Razorbill, Great Cormorant, Black-legged Kittiwake, Northern Gannet, Yellow Rail, Black-crowned Night-Heron, shorebirds
Timeline:	**Lead Organization:** Canadian Wildlife Service - Quebec
Activity: Management	

Partner Organizations:

Costs:

Current Support:

Unfunded:

Potential Sources:

<table>
<tr><td>85</td><td>Program/Project Name: Magdalen Islands Acquisition and Management</td><td>Submitted by:
BCR14 Bird Plan</td></tr>
<tr><td colspan="3">Implementation Priority:</td></tr>
<tr><td colspan="3">Rationale:</td></tr>
<tr><td colspan="2">Objectives:

• Acquisition to infill Pointe de l`Est NWA
• Human management, particularly on beaches
• Bird Rocks, habitat management would increase Gannets (remove buildings)</td><td>Deliverables:

• Acquisition of Havre aux Basques</td></tr>
<tr><td colspan="2">Location: Magdalen Islands, Quebec</td><td>Target Species: Northern Gannet, Razorbill, Black-legged Kittiwake, Black Guillemot, Great Cormorant, Common Tern, Pied-billed Grebe, Horned Grebe, Leach’s Storm-Petrel, waterfowl, shorebirds, landbirds</td></tr>
<tr><td colspan="2">Timeline:</td><td rowspan="2">Lead Organization: Canadian Wildlife Service - Quebec</td></tr>
<tr><td colspan="2">Activity: Acquisition and Management</td></tr>
<tr><td colspan="3">Partner Organizations:</td></tr>
<tr><td colspan="3">Costs:</td></tr>
<tr><td colspan="3">Current Support:</td></tr>
<tr><td colspan="3">Unfunded:</td></tr>
<tr><td colspan="3">Potential Sources:</td></tr>
</table>

86	**Program/Project Name:** St. Lawrence Coast Acquisition and Stewardship	**Submitted by:** BCR14 Bird Plan Contact: Al Hanson
Implementation Priority:		
Rationale: Development along the St. Lawrence Coast is increasing.		
Objectives: • Acquisition and stewardship of lands necessary for beach and island nesters	**Deliverables:**	
Location: St. Lawrence Coast, Quebec	**Target Species:** Colonial seabirds, wading birds, waterfowl, shorebirds	
Timeline:	**Lead Organization:**	
Activity: Acquisition and Management		
Partner Organizations:		
Costs:		
Current Support:		
Unfunded:		
Potential Sources:		

<table>
<tr><td>87</td><td>Program/Project Name: St. Margaret’s Bay and Mahone Bay Island Acquisition and Stewardship</td><td>Submitted by:
BCR14 Bird Plan
Contact: Andrew Boyne (CWS)</td></tr>
<tr><td colspan="3">Implementation Priority:</td></tr>
<tr><td colspan="3">Rationale:</td></tr>
<tr><td colspan="2">Objectives:

• Acquisition and stewardship of islands</td><td>Deliverables:</td></tr>
<tr><td colspan="2">Location: The islands of St. Margaret’s Bay and Mahone Bay, NS</td><td>Target Species: Colonial waterbirds, wadingbirds, waterfowl</td></tr>
<tr><td colspan="2">Timeline: Ongoing</td><td rowspan="2">Lead Organization:</td></tr>
<tr><td colspan="2">Activity: Acquisition and Management</td></tr>
<tr><td colspan="3">Partner Organizations:</td></tr>
<tr><td colspan="3">Costs:</td></tr>
<tr><td colspan="3">Current Support:</td></tr>
<tr><td colspan="3">Unfunded:</td></tr>
<tr><td colspan="3">Potential Sources:</td></tr>
</table>

<table>
<tr><td>88</td><td>Program/Project Name: Great Cormorant Monitoring in BCR14</td><td>Submitted by:
BCR14 Bird Plan Contacts: Brad Allen, Andrew Boyne</td></tr>
<tr><td colspan="3">Implementation Priority:</td></tr>
<tr><td colspan="3">Rationale:</td></tr>
<tr><td colspan="2">Objectives:

• Requirement for surveys and general status assessment (may just require paper exercise or BNA account may cover)</td><td>Deliverables:</td></tr>
<tr><td colspan="2">Location: BCR 14</td><td>Target Species: Great Cormorant</td></tr>
<tr><td colspan="2">Timeline:</td><td rowspan="2">Lead Organization:</td></tr>
<tr><td colspan="2">Activity: Monitoring</td></tr>
<tr><td colspan="3">Partner Organizations:</td></tr>
<tr><td colspan="3">Costs:</td></tr>
<tr><td colspan="3">Current Support:</td></tr>
<tr><td colspan="3">Unfunded:</td></tr>
<tr><td colspan="3">Potential Sources:</td></tr>
</table>

89	**Program/Project Name:** Seabird Colony Restoration in BCR 14	**Submitted by:** BCR14 Bird Plan

Implementation Priority:

Rationale:

Potential exists for restoration at several sights throughout BCR 14.

Objectives:	**Deliverables:**
• Restoration of seabird nesting sites in BCR 14	
Location: BCR 14	**Target Species:** Colonial seabirds, wadingbirds
Timeline:	**Lead Organization:**
Activity: Management	

Partner Organizations:

Costs:

Current Support:

Unfunded:

Potential Sources:

<table>
<tr><td>90</td><td>Program/Project Name: Salt Marsh Monitoring Program in BCR 14</td><td>Submitted by:
BCR14 Bird Plan, Contact: Tom Hodgeman</td></tr>
<tr><td colspan="3">Implementation Priority:</td></tr>
<tr><td colspan="3">Rationale:</td></tr>
<tr><td colspan="2">Objectives:

• Develop a Salt Marsh Monitoring Program
• Develop an Implementation network</td><td>Deliverables:</td></tr>
<tr><td colspan="2">Location: BCR 14</td><td>Target Species: Waterbirds, landbirds, waterfowl, shorebirds</td></tr>
<tr><td colspan="2">Timeline:</td><td rowspan="2">Lead Organization: Canadian Wildlife Service, Bird Studies Canada</td></tr>
<tr><td colspan="2">Activity: Monitoring</td></tr>
<tr><td colspan="3">Partner Organizations:</td></tr>
<tr><td colspan="3">Costs:</td></tr>
<tr><td colspan="3">Current Support:</td></tr>
<tr><td colspan="3">Unfunded:</td></tr>
<tr><td colspan="3">Potential Sources: CWS, USFWS, USGS, State Wildlife Grants</td></tr>
</table>

<table>
<tr><td>91</td><td>Program/Project Name: Seabird By-catch and Oil Spill Issues in BCR 14</td><td>Submitted by:
BCR14 Bird Plan
Contacts: John Chardine, Tony Lock</td></tr>
<tr><td colspan="3">Implementation Priority:</td></tr>
<tr><td colspan="3">Rationale:</td></tr>
<tr><td colspan="2">Objectives:

• Need to monitor impact of threats
• Develop oil spill plans</td><td>Deliverables:</td></tr>
<tr><td colspan="2">Location: BCR 14</td><td>Target Species: Colonial waterbirds, pelagic seabirds, waterfowl</td></tr>
<tr><td colspan="2">Timeline:</td><td rowspan="2">Lead Organization: Canadian Wildlife Service?</td></tr>
<tr><td colspan="2">Activity: Monitoring, Management</td></tr>
<tr><td colspan="3">Partner Organizations:</td></tr>
<tr><td colspan="3">Costs:</td></tr>
<tr><td colspan="3">Current Support:</td></tr>
<tr><td colspan="3">Unfunded:</td></tr>
<tr><td colspan="3">Potential Sources:</td></tr>
</table>

92	**Program/Project Name:** Surveys of Birds Wintering in BCR 14	**Submitted by:** BCR14 Bird Plan, Contacts: Keith McAloney, Dan Bordage
Implementation Priority:		
Rationale: Some surveys are already ongoing but maintenance and increases are necessary.		
Objectives: • Population delineation, breeders to wintering sites		**Deliverables:**
Location: BCR 14		**Target Species:** Common Loon, Red-throated Loon, Horned Grebe, Red-Necked Grebe, waterfowl, Purple Sandpipers
Timeline:		**Lead Organization:**
Activity: Monitoring		
Partner Organizations:		
Costs:		
Current Support:		
Unfunded:		
Potential Sources: CWS, USFWS		

93	**Program/Project Name:** Coastal Ethics Outreach and Education	**Submitted by:** BCR14 Bird Plan
Implementation Priority:		
Rationale:		
Objectives:	**Deliverables:** • A USFWS Island Ethics brochure	
Location: BCR 14	**Target Species:** Waterbirds, waterfowl, shorebirds	
Timeline: **Activity:** Education/outreach	**Lead Organization:**	
Partner Organizations: Gulf of Maine Expedition		
Costs:		
Current Support:		
Unfunded:		
Potential Sources:		

<table>
<tr><td>94</td><td>Program/Project Name: Expand Marine Conservation Education in BCR 14</td><td>Submitted by:
BCR14 Bird Plan
Contact: Scott Hall</td></tr>
<tr><td colspan="3">Implementation Priority:</td></tr>
<tr><td colspan="3">Rationale:</td></tr>
<tr><td colspan="2">Objectives:

• Use Puffin Project as a model</td><td>Deliverables:</td></tr>
<tr><td colspan="2">Location: BCR 14</td><td>Target Species: Waterbirds, waterfowl., shorebirds</td></tr>
<tr><td colspan="2">Timeline:</td><td rowspan="2">Lead Organization:</td></tr>
<tr><td colspan="2">Activity: Education/outreach</td></tr>
<tr><td colspan="3">Partner Organizations:</td></tr>
<tr><td colspan="3">Costs:</td></tr>
<tr><td colspan="3">Current Support:</td></tr>
<tr><td colspan="3">Unfunded:</td></tr>
<tr><td colspan="3">Potential Sources: State Wildlife Grants</td></tr>
</table>

95	**Program/Project Name:** Coastal Education Center	**Submitted by:** BCR14 Bird Plan Contact: Linda Welch
Implementation Priority:		
Rationale:		
Objectives: • Development of a coastal education center		**Deliverables:**
Location: BCR 14		**Target Species:** All birds
Timeline:		**Lead Organization:**
Activity: Education/outreach		
Partner Organizations:		
Costs:		
Current Support:		
Unfunded:		
Potential Sources:		

96	**Program/Project Name:** Control Recreation and Development in BCR 14's Coastal Marshes	**Submitted by:** BCR14 Bird Plan Contact: Al Hanson
Implementation Priority:		
Rationale:		
Objectives: • Increase regulatory agency awareness		**Deliverables:**
Location: BCR 14 marshes		**Target Species:** Marshbirds, wadingbirds, waterfowl, landbirds, etc.
Timeline:		**Lead Organization:**
Activity: Education/outreach		
Partner Organizations: CWS, Gulf of Maine Program, USFWS Refuge Program, USFWS		
Costs:		
Current Support:		
Unfunded:		
Potential Sources:		

97	**Program/Project Name:** Guidelines for Man-made Wetlands	**Submitted by:** BCR14 Bird Plan

Implementation Priority:

Rationale:

To what extent are man-created wetlands desirable or beneficial to wetland birds in BCR 14? This issue has implications for dam maintenance and re-licensing, and for design, funding, and regulatory review of projects that would create or modify wetlands.

Objectives: • Develop guidance/recommendations on the importance and management of man-made wetlands.	**Deliverables:**
Location: BCR 14	**Target Species:** Marshbirds, wadingbirds, waterfowl, shorebirds
Timeline:	**Lead Organization:** Inland Wetland Group
Activity: Education/outreach and Management	

Partner Organizations:

Costs:

Current Support:

Unfunded:

Potential Sources: State Wildlife Grants

98	**Program/Project Name:** Guidelines for Beaver-created Wetlands	**Submitted by:** BCR14 Bird Plan

Implementation Priority:

Rationale:

This issue has implications relative to both local and regional beaver management, including removal of "nuisance" dams, and future modifications of trapping regulations.

Objectives: • Develop guidance/ recommendations on the importance of beaver-created wetlands to wetland birds in BCR-14	**Deliverables:**
Location: BCR 14	**Target Species:** Marshbirds, wadingbirds, waterfowl, shorebirds, landbirds
Timeline:	**Lead Organization:** Inland Wetland Group
Activity: Education/outreach, management	

Partner Organizations:

Costs:

Current Support:

Unfunded:

Potential Sources: State Wildlife Grants

99	**Program/Project Name:** Inventories of Inland Wetlands in BCR 14	**Submitted by:** BCR14 Bird Plan

Implementation Priority:

Rationale:

The Greatest need is in Canadian portions of BCR 14.

Objectives: • Conduct comprehensive inventories to determine distributions and relative abundances of birds of inland wetlands.	**Deliverables:**
Location: BCR 14	**Target Species:** Marshbirds, wadingbirds, waterfowl, shorebirds, landbirds
Timeline:	**Lead Organization:** Inland Wetland Group
Activity: Research and Monitoring	

Partner Organizations:

Costs:

Current Support:

Unfunded:

Potential Sources: State Wildlife Grants, CWS, USFWS, USGS

100	**Program/Project Name:** Standardized Inland Wetland Monitoring In BCR 14	**Submitted by:** BCR14 Bird Plan

Implementation Priority:

Rationale:

Monitoring should be coordinated and consistent with monitoring protocols and programs for wetland birds in other BCRs and continent-wide.

Objectives: • Implement standardized, region-wide monitoring of inland wetland bird abundance and distribution.	**Deliverables:**
Location: BCR 14	**Target Species:** Marshbirds, wadingbirds, waterfowl, shorebirds, landbirds
Timeline:	**Lead Organization:** Inland Wetland Group
Activity: Monitoring	

Partner Organizations:

Costs:

Current Support:

Unfunded:

Potential Sources: State Wildlife Grants, CWS, USFWS, USGS

101	**Program/Project Name:** Inland Wetland Data Sharing in BCR 14	**Submitted by:** BCR14 Bird Plan

Implementation Priority:

Rationale:

Objectives: • Develop mechanisms for data sharing. • Ensure that inventory and monitoring data are available to help inform and guide conservation programs, including habitat acquisition and management.	**Deliverables:**
Location: BCR 14	**Target Species:** Marshbirds, wadingbirds, waterfowl, shorebirds, landbirds
Timeline: **Activity:** Monitoring	**Lead Organization:** Inland Wetland Group

Partner Organizations:

Costs:

Current Support:

Unfunded:

Potential Sources: State Wildlife Grants, CWS,

102	**Program/Project Name:** Coordination of Inland Wetland Conservation Efforts Between BCRs	**Submitted by:** BCR14 Bird Plan

Implementation Priority:

Rationale:

Potential threats include wetland loss or modification, exotic vegetation, disease, oil spills, and wind towers.

Objectives: • Coordinate with other BCR's south of BCR 14 to ensure that conservation actions are being taken to reduce threats to inland wetland birds and their habitats during migration and in winter.	**Deliverables:**
Location: BCR 14	**Target Species:** Marshbirds, wadingbirds, waterfowl, shorebirds, landbirds
Timeline:	**Lead Organization:** Inland Wetland Group
Activity: Education/outreach	

Partner Organizations:

Costs:

Current Support:

Unfunded:

Potential Sources:

103	**Program/Project Name:** NYC Audubon's Harbor Herons Project: Nesting Survey	**Submitted by:** Yigal Gelb

Lead Organization: New York City Audubon	**Partner Organization:** Parks, Nat. Parks Service-Gateway, American Littoral Society, Andy Bernick, Wildlife Trust,
Location: New York Harbor	**Target Species:** Wading birds, cormorants, gulls
General Description: Research	**Timeline:** 2004

Project Description:

Surveys were conducted annually between mid-May and mid-June at approximately the same dates each year. Islands surveyed included Shooters and Prall's islands and Isle of Meadows in the Arthur Kill-Kill van Kull; Hoffman and Swinburne islands off southern Staten Island; Canarsie Pol and Ruffle Bar in Jamaica Bay; White Island (Salt Marsh Nature Center), Brooklyn; North Brother, South Brother, and U Thant islands and Mill Rock in the East River; Goose Island in the Hutchinson River; and Huckleberry Island in Long Island Sound (Westchester County). At each island, researchers located nests and determined if they were active based on the presence of adults on or near the nest, evidence of fresh construction, and the presence of eggs or nestlings.

Objectives:

- Estimate wading bird breeding population
- Verify breeding location in Harbor
- Gather young/egg data

Deliverables:

- Annual Report - These Reports were produced by various researchers since 1982 (Smith et al. 1982, Parsons 1986-1995, Kerlinger 1996-2004).

Criteria for Measuring Success:

- Accuracy of the count
- Number of Islands surveyed

Project Achievements to Date:

- Annual reports since 1986

Current Support:

Costs:	**Unfunded:**

Potential Sources:

Contact Person:
Yigal Gelb

104	**Program/Project Name:** The Healthy Harbor Herons Project	**Submitted by:**

Lead Organization: NYC Audubon, Wildlife Trust	**Partner Organization:** City of New York Parks and Recreation, NYS Department of Environmental Conservation, National Parks Service, College of Staten Island, Columbia University
Location: New York Harbor and foraging sites in NJ	**Target Species:** Wading birds
General Description (research, edu, advocacy, acquisition, citizen science, restoration, management)**:** Research	**Timeline:** Initiated spring 2004; long-term

Project Description: The Healthy Harbor Herons Project involves researchers in the collection of baseline health data for wading birds in NY Harbor, as well as birders in data collection of wading bird movement from their breeding grounds to foraging grounds. Toxicity in the environment has been documented to have a negative impact on wading birds. It is possible that toxicity is the cause of the declines of wading birds in NY Harbor. By expanding Parson's studies of the 80's and 90's, the project aims to document the foraging grounds and the levels of contamination. With this knowledge, managers of these areas can improve the water quality to safeguard the health of these magnificent birds.

Objectives:

- Develop methods for health research and bird tagging
- Train a core of volunteer birders to monitor foraging grounds
- Write a report for natural resources managers and advocate for the implementation of its recommendations

Deliverables:

- Report
- Well-trained volunteers ready for future projects

Criteria for Measuring Success:

- Number of volunteers trained each year
- Number of birds banded

Project Achievements to Date:

- Annual Report
- Paper Publication

Current Support: Spring -Summer 2004: $14,000 NYC Environmental Fund, $12,000 Hudson River Estuary Grants Program

Costs: $171,00 total project cost per year	**Unfunded:** $145,000

Potential Sources: State Wildlife Grant

Contact Person: E.J. McAdams, NYC Audubon. harberherons@yahoo.com, 212 691 7483, Scott Newman, Wildlife Trust.

105	**Program/Project Name:** NYC Audubon's Harbor Herons Monitoring Program	**Submitted by:**

Lead Organization: New York City Audubon	**Partner Organization:** Castle Oil, Fuji Film, CUNY, American Littoral Society
Location: New York Harbor	**Target Species:** Wading birds,
General Description: Citizen Science, education	**Timeline:** 2005

Project Description:

NYC Audubon's *Harbor Herons Monitoring Program* (HHMP) promotes stewardship of the New York – New Jersey Estuary through a unique initiative that focuses on the Estuary's long-legged wading birds, the egrets, herons and ibis that are commonly known as the Harbor Herons. The program identifies and maps the foraging grounds of herons, egrets, and ibis nesting in the Estuary using boats, shore monitoring, and aerial surveys. The HHMP uses this information to ensure that foraging areas are protected and conserved.

Objectives:

- Identify flight lines in Harbor
- Identify foraging areas

Deliverables:

- Annual Report and GIS-based database

Criteria for Measuring Success:

- Number of volunteers involved
- Number of hours monitoring
- Number of areas identified accurately

Project Achievements to Date:

- Three reports and a GIS-based database

Current Support:

Costs:	**Unfunded:**

Potential Sources:

Contact Person:
Yigal Gelb

106	**Program/Project Name**: **Exploring the Cormorant Controversy**	**Submitted by:** National Audubon Society

Implementation Priority: This is primarily a traveling school outreach program, for **grades 5-8**, which takes portions of several days to implement because it involves classroom presentations, research, and a culminating Town Meeting. It uses the illegal killing of 900 double-crested cormorants in Lake Ontario in 1998 as a jumping off point for investigating the 400 years of interaction between the birds and people. It can also be presented as a 2-3 hour **teacher workshop**, at conferences and meetings.

Rationale. There are many examples of human-wildlife interactions that have reached controversial proportions, such as deer or Canada geese invading suburbia, and cormorants eating game fish at popular lakes. This multi-disciplinary program engages students in the ongoing cormorant controversy and teaches them critical thinking skills, which are sadly lacking in much of today's educational settings. Students need to know that ecological issues are complex and involve decades or even centuries of history of human activity, much of which is out of view. Exploring the Cormorant Controversy will allow students the opportunity to jump into a hot button environmental issue and figure out their own answers.

Objectives:	**Deliverables:**
• Learn about why Double-crested Cormorants are unpopular with many sportsmen, and what the real issues are, and why it is easy to blame these birds for the loss of sport fish. • Develop critical thinking skills so that complex ecological issues are not idly tossed aside with simplistic answers. • Create an atmosphere where real learning and research can go forward, leading to an informed viewpoint and a comfort level with explaining one's views in public.	• A well-researched and well-run classroom debate, focusing on whether or not cormorants are to blame for the decrease in game fish, such as smallmouth bass and yellow perch. * An understanding of how many environmental and human factors come together to form a controversial social issue.
Location: Northeastern United States	**Target Species:** Double-crested Cormorants
Timeline: This program is available to schools during most of the school year.	**Lead Organization:** Seabird Restoration Program of the National Audubon Society.
Activity: Education	

Partner Organizations: Potential partners include various state Audubon Societies, wildlife groups, and local schools.

Costs: This will be specific to how much time is spent at each school, and the location of the school. For example, a school program within an hour of driving from our educator's workplace, that will be visited for three, two and a half hour sessions cost approximately $800, including mileage, props, handouts, and materials**. Many schools would like to have this program presented at their school, but do not have the funds. A grant to Audubon would bring this program to schools in areas where the cormorant controversy is a real world topic.**

Current Support: The program has been field tested and presented to a variety of groups, including teachers at workshops and conferences. It is now available where funds are available.

Unfunded:)

Potential Sources: To be determined. (foundations, corporations, etc.)

<table>
<tr><td>107</td><td>Program/Project Name: Mid-Atlantic Monitoring Database Expansion</td><td>Submitted by:
Manomet Center for Conservation Sciences</td></tr>
<tr><td colspan="3">Implementation Priority:</td></tr>
<tr><td colspan="3">Rationale:</td></tr>
<tr><td colspan="2">Objectives:

• Expand existing regional monitoring database, compiling all state and federal surveys</td><td>Deliverables:</td></tr>
<tr><td colspan="2">Location: Mid-Atlantic/Lower BCR 30</td><td>Target Species:</td></tr>
<tr><td colspan="2">Timeline: Ongoing</td><td rowspan="2">Lead Organization:</td></tr>
<tr><td colspan="2">Activity: Research</td></tr>
<tr><td colspan="3">Partner Organizations:</td></tr>
<tr><td colspan="3">Costs:</td></tr>
<tr><td colspan="3">Current Support:</td></tr>
<tr><td colspan="3">Unfunded:</td></tr>
<tr><td colspan="3">Potential Sources: State Wildlife Grant</td></tr>
</table>

108	Program/Project Name: **Habitat Creation and Restoration Mid-Atlantic – Lower BCR 30 Conservation Projects**	**Submitted by:** Dave Jenkins

Location: Waterbird Focus Areas (ex. Stone Harbor)	**Lead Organization:**
Partner Organizations:	
Timeline:	**Target Species:**
Activity: Management	
Objectives: Create and restore breeding & nonbreeding habitat through manipulation, augmentation (ex. human-related predator removal)	**Benefits/Issues:**
Costs:	
Current Support:	
Unfunded:	
Potential Sources: State Wildlife Grant	
Implementation Priority:	

109	Program/Project Name: **Stratton Island Research and Management - Gulf of Maine Conservation Projects**	**Submitted by:** Scott Hall

Location: Stratton Island	**Lead Organization:** National Audubon
Partner Organizations:	
Timeline:	**Target Species:** Seabirds, Waders
Activity: Research and Management	
Objectives: Manage species interactions Vegetation control and study	**Benefits/Issues:**
Costs:	
Current Support:	
Unfunded:	
Potential Sources:	
Implementation Priority:	

110	Program/Project Name: **Little Duck Island Management - Gulf of Maine Conservation Projects**	**Submitted by:** Scott Hall
Location: Little Duck Island		**Lead Organization:** National Audubon
Partner Organizations:		
Timeline:		**Target Species:**
Activity:		
Objectives:		**Benefits/Issues:**
Costs:		
Current Support:		
Unfunded:		
Potential Sources:		
Implementation Priority:		

111	Program/Project Name: **Eastern Egg Rock Management - Gulf of Maine Conservation Projects**	**Submitted by:** Scott Hall
Location: Eastern Egg Rock		**Lead Organization:** National Audubon
Partner Organizations:		
Timeline:		**Target Species:**
Activity:		
Objectives:		**Benefits/Issues:**
Costs:		
Current Support:		
Unfunded:		
Potential Sources:		
Implementation Priority:		

112	Program/Project Name: **Nest Site Acquisition - Southern New England – Long Island Sound Conservation Projects**	**Submitted by:** Jenny Dickson

Location: Pleasure Beach Long Beach	**Lead Organization:**
Partner Organizations:	
Timeline:	**Target Species:** Herons Marshbirds
Activity:	
Objectives: Land and water conservation	**Benefits/Issues:**
Costs: Around $10 million	
Current Support:	
Unfunded:	
Potential Sources:	
Implementation Priority:	

113	Program/Project Name: **Craney Island - Mid-Atlantic – Lower BCR 30 Conservation Projects**	**Submitted by:** Ruth Boettcher

Location: Portsmouth, VA	**Lead Organization:**
Partner Organizations:	
Timeline: Annual **Activity:**	**Target Species:** Piping Plover, Least Tern
Objectives: Monitor and manage (create habitat)	**Benefits/Issues:**
Costs: $25,000	
Current Support: $25,000	
Unfunded:	
Potential Sources:	
Implementation Priority:	

114	Program/Project Name: **Protection Incentives - Mid-Atlantic – Lower BCR 30 Conservation Projects**	**Submitted by:** Karen Bennett (SWG list)

Location: Middle Island (DE); Mispillion Harbor (DE); South Bowers Beach (DE); Plantation properties on James River; Troy Meadows (NJ)	**Lead Organization:**
Partner Organizations:	
Timeline: **Activity:** Management	**Target Species:**
Objectives: Provide incentives and other methods to create easements, purchase development rights, or acquire land for waterbird focus areas	**Benefits/Issues:**
Costs:	
Current Support:	
Unfunded:	
Potential Sources: State Wildlife Grant	
Implementation Priority:	

115	Program/Project Name: **Grandview Nature Preserve** **Mid-Atlantic – Lower BCR 30 Conservation Projects**	**Submitted by:** Ruth Beck

Location: Hampton, VA	**Lead Organization:** Biology - College of William and Mary Ruth Beck
Partner Organizations: Hampton Parks and Recreation	
Timeline: Long-Term; Breeding Season **Activity:** Monitoring and Public Outreach	**Target Species:** Least Tern, Common Tern, AMOY
Objectives: Determine productivity Outreach program for public (recreational, boats, and the PWC) Set up volunteer traning workshops to provide informed and low cost assistance Posting on all 3 islands where birds nest Bring in local/state protection and enforcement agencies Brochure posted	**Benefits/Issues:** Important area for LETE nesting and very heavily used
Costs: Weekly/weekend monitoring (about $10,000/season) Requires 3 at this site	
Current Support: State UDGTF provided signs for posting	
Unfunded: Basically and currently unfunded	
Potential Sources: Hampton Parks and Recreation Landowners VDGIF	
Implementation Priority:	

116	Program/Project Name: **Large Bird Population vs. Public Safety - Mid-Atlantic – Lower BCR 30 Conservation Projects**	**Submitted by:** Ruth Beck

Location: Hampton Roads Bridge Tunnel Island	**Lead Organization:** Biology - College of William and Mary
Partner Organizations:	
Timeline: Annual; Long-Term Monitoring **Activity:** Management and Adjustment	**Target Species:** Black Skimmer, Common Tern, Gull-billed Tern, Laughing Gull, Herring Gull
Objectives: Determine productivity of waterbirds (BLSK, COTE, GBTE) at man-made island site Determine avian predator controls at this site (we know the detrimental effects on the egg and chick stages of the terns and skimmers) Determine the outside food source for gulls	**Benefits/Issues:** Substrate for skimmers and terns created and augmented Determined that Black Skimmers are not fledging young (they are not straving? - works on food partitioning and prey availability)
Costs: Field assistant/grad or undergrad student (April-Aug): $1500 Monitoring equipment upgrade: $500	
Current Support: VDOT provides all substrate needed to create specific sites	
Unfunded: no funds other than what I can earn or have in local funds at College	
Potential Sources: VDOT, VA Department of Game, Fish & Willdlife, Norfolk Foundation	
Implementation Priority: need to control avian predators at this site	

117	Program/Project Name: **Artificial vs. Natural Nest Site Use - Mid-Atlantic – Lower BCR 30 Conservation Projects**	**Submitted by:** Ruth Beck? (SWG list)

Location:	**Lead Organization:**
Partner Organizations:	
Timeline:	**Target Species:**
Activity: Research	
Objectives: Research life history and population effects of artificial/urban vs. natural nest site use	**Benefits/Issues:**
Costs:	
Current Support:	
Unfunded:	
Potential Sources: State Wildlife Grants	
Implementation Priority:	

118	Program/Project Name: **New York Marshbird Monitoring Project - Southern New England – Long Island Sound Conservation Projects**	**Submitted by:** Dave Adams
Location: NY state		**Lead Organization:** Dave Adams
Partner Organizations:		
Timeline:		**Target Species:** Rails
Activity:		
Objectives: Model for other states		**Benefits/Issues:** Call back CT?
Costs:		
Current Support:		
Unfunded:		
Potential Sources:		
Implementation Priority:		

119	Program/Project Name: **Marshbird Inventory - Southern New England – Long Island Sound Conservation Projects**	**Submitted by:** Dave Adams, Jenny Dickson, state reps

Location:	**Lead Organization:** University of Connecticut Fordham
Partner Organizations: Coordinate with PIF	
Timeline: **Activity:** Management	**Target Species:** Nesting marshbirds
Objectives: Integrate across regions Related species ID key freshwater habitats	**Benefits/Issues:**
Costs:	
Current Support:	
Unfunded:	
Potential Sources: CCI grant - USFWS to refuges (CT, RI, ME, LIS)	
Implementation Priority:	

120	Program/Project Name: **New York Loon Monitoring - Southern New England – Long Island Sound Conservation Projects**	**Submitted by:** Dave Adams
Location: Adirondacks	**Lead Organization:**	
Partner Organizations:		
Timeline:	**Target Species:** Common Loon	
Activity:		
Objectives: Radar?	**Benefits/Issues:**	
Costs:		
Current Support:		
Unfunded:		
Potential Sources:		
Implementation Priority:		

121	Program/Project Name: **Long Island South Shore Program - Southern New England – Long Island Sound Conservation Projects**	**Submitted by:** Dave Adams

Location:	**Lead Organization:** NY State Department
Partner Organizations: Nancy Welch	
Timeline:	**Target Species:**
Activity:	
Objectives: Restoration Website	**Benefits/Issues:**
Costs:	
Current Support:	
Unfunded:	
Potential Sources:	
Implementation Priority:	

122	Program/Project Name: **Lake Ontario Inventory - Southern New England – Long Island Sound Conservation Projects**	**Submitted by:** Dave Adams

Location: Lake Ontario	**Lead Organization:**
Partner Organizations:	
Timeline: **Activity:** Management and Education	**Target Species:** Migratory loons, grebes
Objectives:	**Benefits/Issues:**
Costs:	
Current Support:	
Unfunded:	
Potential Sources:	
Implementation Priority:	

123	Program/Project Name: **Tern Integration - Southern New England – Long Island Sound Conservation Projects**	**Submitted by:** Dave Adams

Location: NY state	**Lead Organization:**
Partner Organizations:	
Timeline:	**Target Species:** Common Tern
Activity:	
Objectives: Integration	**Benefits/Issues:**
Costs:	
Current Support:	
Unfunded:	
Potential Sources:	
Implementation Priority:	

124	**Program/Project Name:** Vegetation Management - Southern New England – Long Island Sound Conservation Projects	**Submitted by:** Sara Williams

Location:	**Lead Organization:**
Partner Organizations:	
Timeline:	**Target Species:**
Activity: Management	
Objectives: Demonstration project on refuge	**Benefits/Issues:** Coastal general management issues
Costs: State and feds need money	
Current Support:	
Unfunded:	
Potential Sources:	
Implementation Priority:	

125	Program/Project Name: **State Outreach and Education - Mid-Atlantic – Lower BCR 30 Conservation Projects**	**Submitted by:** State Non-Game Programs (SWG list)

Location:	**Lead Organization:**
Partner Organizations:	
Timeline:	**Target Species:**
Activity: Education	
Objectives: Increase capability to minimize abundant and nuisance species conflicts and negative human responses Identify state staff and partners (NGOs) Monitor public perception/behaviors to determine existing and impending threat (could tie in with biological monitoring)	**Benefits/Issues:**
Costs:	
Current Support:	
Unfunded:	
Potential Sources: State Wildlife Grant	
Implementation Priority:	

126	Program/Project Name: **Eroded nesting sites - Southern New England – Long Island Sound Conservation Projects**	**Submitted by:** Andrew MacLachlan

Location:	**Lead Organization:**
Partner Organizations:	
Timeline:	**Target Species:**
Activity:	
Objectives:	**Benefits/Issues:**
Costs:	
Current Support:	
Unfunded:	
Potential Sources:	
Implementation Priority:	

127	Program/Project Name: **Waterbird Focus Area Enhancement - Mid-Atlantic – Lower BCR 30 Conservation Projects**	**Submitted by:** Dave Jenkins

Location:	**Lead Organization:**
Partner Organizations:	
Timeline:	**Target Species:**
Activity: Management	
Objectives: Establish, maintain and enhance waterbird focus areas using dredged materials (eg. ACOE dredge spoil projects)	**Benefits/Issues:**
Costs:	
Current Support:	
Unfunded:	
Potential Sources: State Wildlife Grant	
Implementation Priority:	

128	Program/Project Name: **Manage/Restore Wild Rice Habitat - Mid-Atlantic – Lower BCR 30 Conservation Projects**	**Submitted by:** Dave Brinker? (SWG list)
Location:	**Lead Organization:**	
Partner Organizations:		
Timeline: **Activity:** Management	**Target Species:** Rails	
Objectives:	**Benefits/Issues:**	
Costs:		
Current Support:		
Unfunded:		
Potential Sources: State Wildlife Grant		
Implementation Priority:		

129	Program/Project Name: **Productivity and monitoring of secretive wetlands birds in CT - Mid-Atlantic – Lower BCR 30 Conservation Projects**	**Submitted by:** Min Huang
Location: CT	**Lead Organization:**	
Partner Organizations:		
Timeline: **Activity:** Monitoring/Research	**Target Species:** Rails	
Objectives:	**Benefits/Issues:**	
Costs:		
Current Support:		
Unfunded:		
Potential Sources:		
Implementation Priority:		